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ABSTRACT

Characteristics and attendance patterns of persisters and dropouts from college and vocational/technical schools were studied, and a model of the persistence process was tested using data from the National Longitudinal Study (NLS), which surveyed high school seniors in 1972, with followup surveys in 1973 and 1974. Student persistence was defined as the relationships of educational status and educational aspirations over time. Study variables included scores from a cognitive test battery, high school and college grades, student and family characteristics, the influence of parents and friends, course of study, hours spent studying and in work outside school, and educational aspirations. In addition to confirmatory factor analysis, the basis analytical approach was path analysis, which provided models for socioeconomic status, academic ability measures, educational aspiration, and educational status, as well as a schemata representative of student development. During the first 3 years after high school, 26 percent of the high school seniors continued their education without interruption. Extensive appendices include: questionnaire items; a list of variables and path coefficients; attendance data by level, race, and sex; and percentage comparisons of attendance patterns. (SW)

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College Board
Report
No. 82-5

Persistence in Higher Education

Thomas L. Hilton

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Persistence in Higher Education: An Empirical Study

Thomas L. Hilton

Educational Testing Service

College Board Report No. 82-5

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College Entrance Examination Board, New York, 1982

The author is indebted to Paul Butler-Nalin, who provided assistance in searching the literature on persistence, and to Charles E. Werts, who supervised the data analysis, and to Len Ramist and Jerilee Grandy for their thoughtful and helpful reviews of an earlier draft of the paper.

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ABSTRACT

Most past studies of persistence in higher education have been limited for one or more reasons:

1. They were based on single schools or small samples of schools.
2. They were based on retrospective data collected *after* the student dropped out.
3. They examined a narrow range of possible causal variables.
4. The data analysis failed to control for spurious correlations or to take error of measurement into consideration.

This study was designed to respond to these shortcomings. The data were drawn from the National Longitudinal Study, whose sample members were first surveyed as high school seniors in 1972. The file provided a range of personal and biographical data on approximately 21,000 subjects. The data analysis made use of recently developed confirmatory factor analysis and causal modeling techniques.

Examination of the patterns of attendance during the first three years after high school showed that 26 percent of the high school seniors continued their education in either two- or four-year colleges without interruption for the three-year period. A somewhat higher percentage of white students than black students continued their education after high school, but among those who continued, the rate of dropping out did not differ appreciably between black students and white. Nor did it differ for male and female students. Furthermore, when the results are examined separately for two- and four-year colleges, the results are generally similar.

The causal modeling indicated that retention in higher education is influenced primarily by previous educational status. This in turn was influenced by high school curriculum, which points to the importance of early determinants of educational development. Also, persistence was influenced by academic performance, which is well known. The unexpected result was that other variables such as race, sex, socioeconomic status, and hours worked did not affect persistence, suggesting that studies that have found such relationships have fallen prey to spurious correlations. The author concluded that the complex analytical techniques used were productive but that even more comprehensive personal and situational data and other research strategies are required to unravel this important problem.

INTRODUCTION

The objectives of this study were:

- to identify the major characteristics of students who persist in college in terms of patterns and duration of attendance,
- to examine potential dropouts to determine why some persist while others drop out as predicted, and
- to conceptualize and test a comprehensive model of the persistence process using the National Longitudinal Study (NLS) data base.

At the college level, "dropout" has been commonly defined from the institution's perspective as a student (a) who does not graduate in four years from the college in which he or she enrolled as a freshman, and (b) whose attendance has not been continuous. Because of obvious limitations in such a definition, other terms such as "persister" and "stopout" have been used in educational research to denote particular categories of students. In the context of a longitudinal design, *persister* usually refers to a person who has attained a particular goal (e.g., a degree) within a specified amount of time (e.g., four years) and who has pursued that goal without significant interruption. *Stopout* refers to a person who is still actively engaged in pursuing the intended goal at the end of the allotted time but who, for a variety of reasons, has not yet attained that goal.

A *dropout* then is one who is neither a persister nor a stopout, i.e., a person not actively pursuing the original goal. Although such terms can be functionally useful, their varied uses in the research literature have led to considerable ambiguity in the interpretation of results.

Throughout the work described here the term *persistence* is used in a generic sense to refer to the complex processes that affect attendance in institutions of higher education. Theoretically, all students who are, have been, or plan to be enrolled in colleges or vocational/technical schools after high school could be described by a single characteristic: the degree of persistence they demonstrate in pursuing their post-high school education. As a characteristic, persistence can be thought of as a dimension anchored at the positive end by successful graduates (one example of which might be called "traditional persisters") and anchored at the negative end by "dropouts." For the purpose of this study, types of persisters were defined according to the patterns of attendance in college and vocational/technical schools during the first three years after high school, the period of time covered by the NLS surveys.

Design Considerations

A decision to enroll in or withdraw from school represents one possible outcome of a complex interaction of a set of variables, which includes aspects of the student's personality, his or her special skills, traits, and needs; the personalities of the other significant figures in his or her social environment, including parents, professors, school officials, and classmates; and the norms and organization of the social systems in which he or she moves. The most general objective of this study was to identify the most crucial

variables and to discover the precise nature of the particular confluence of these variables which resulted in the student's decision to enter, continue, or exit.

In view of the multivariate nature of the persistence process, an adequate study of persisters must take into consideration a variety of variables in order to include those which are likely to play a key role in the process. It is unlikely that any single variable has a dominant effect.

A second requirement of an adequate design is that it must allow for more than one type of persister, especially if the focus is to be on the processes underlying persisters, stopouts, and dropouts.

A third requirement for a satisfactory study results from the fact that persistence is, indeed, a process; that is, it takes place over time. The formal decision to enroll or withdraw occurs at a particular point in time, but the events leading up to it usually have a long history. To fully explicate the phenomena it is desirable, therefore, to have a longitudinal design (i.e., one which examines the subjects at two or more points in time).

This successive measurement of the same individuals provides measures of the rate and direction in which the individual is changing, and these frequently are of more significance than static measures. Consider, for example, a student who, at the point of registering for college, is highly favorable toward a particular course of study and six months later is moderately favorable. The fact that the favorableness of his attitude is decreasing may well be of more interest than the fact that at the second point it is still high relative to other students.

An additional feature of a longitudinal design is that, if continued long enough, it provides information on the eventual destination of the student who graduates, as well as the student who does not. Both are of obvious interest.

Hypotheses

In the substantial amount of research on dropouts that has accumulated over the years, the main emphasis has been on the discovery of traits or factors that distinguish non-persisters from persisters. Since the "dropout" literature has been exhaustively reviewed at regular intervals–see especially the excellent recent review by Ramist (1981)–it is not necessary to resurvey this literature here. In brief, Ramist (op. cit., p. 14) concluded that the following factors are related to persistence: high level of parental education; Oriental, Hispanic, or Jewish identity; being a married male; and being from a contiguous state. On the other hand, Ramist concluded that the relationship of age, sex, parental income, and father's occupation to persistence is not clear. These variables, except for age, are examined in the present study.

At a practical level, the implications of these findings with respect to admissions decisions have been limited, in part because institutions are not about to exclude applicants on the basis of individual characteristics, such as race or family background, regardless of the correlation such characteristics may have with persistence. From our theoretical perspective, the limitations of such findings are obvious: they ignore the complex relationships between the traits or factors peculiar to the individual and the unique characteristics of the environment, most notably the school. Some of these factors are shown in Figure 1 (Hilton 1967).

The general working hypothesis guiding the study was that persisting in higher education represents the cumulative impact of a chain of career decisions by the individual student. Accordingly, the extensive research on career decision-making conducted during the last twenty years, primarily in the United States, was relevant. Dropping out was not viewed as an isolated event but, rather, as one aspect of the student's career development–a development which has both a past history and a future dimension.

At any particular choice point, or node, the student is confronted with a number of alternative pathways (e.g., continuing in present school with same academic major, transferring to another school with different major, or withdrawing from formal education for one semester). The student's choice of pathway reflects a subjective evaluation of the probability that a particular pathway (and pathways to which it will lead to the future) is likely to be need-fulfilling in comparison to alternative pathways. Thus, a particular student's withdrawing from school is not necessarily an indication that he or she finds school unrewarding; it could be that an alternative pathway (e.g., a lucrative commercial opportunity) is viewed as relatively more rewarding.

From this general theoretical position, we can formulate a number of hypotheses about persistence in higher education. (This is done more for future research than for the present study; only a subset of the hypotheses were testable by means of the available data.) Some examples follow, beginning with the most obvious.

1. Students with career goals which require higher education are more likely to persist than students without such goals.
2. Students who find academic activity rewarding (e.g., high ability students with a need for achievement) are more likely to persist than students who do not.
3. How students perceive their academic achievement is a more important factor in persistence than achievement by an absolute standard. (Thus, students of modest ability are more likely to persist at an average school than at a more demanding school where their standing relative to their classmates is lower.)
4. Students who are confronted with a range of competing career options are less likely to persist than those who are not. (Thus, students who have occupational skills that are in demand–e.g., computer programming–are, *ceteris paribus*, more likely to drop out than students who do not.)

5. The decision to persist is a product of a multiplicity of factors (see Figure 1), but, given the limited information processing capacity of the human organism, a particular individual makes such decisions on the basis of a small number of considerations.
6. Since rational decision-making requires information about the probability of outcomes, decisions to change one's career plans (e.g., to drop out) are less likely to be made in the absence of such information. (Thus, paradoxically, providing more occupational information may for certain students increase the probability of their dropping out.)

METHOD

The data used in this study were gathered for the National Longitudinal Study (Hilton and Rhett 1973), which surveyed a national sample of high school seniors in the spring of 1972, with follow-up surveys in the fall terms of 1973 and 1974. Since then further follow-ups have been made. The senior-class survey contained student data from a student questionnaire, a school-record questionnaire, and a cognitive test battery. School data were obtained from a questionnaire typically completed by a principal and counselors also completed a questionnaire. In the follow-up surveys only student-supplied data were obtained.

One advantage of the NLS data is that many questions were asked more than once in different ways. For example, social class was indicated by father's and mother's education, occupation, and income; questions concerning the student's race were asked at two different times, and high school program was asked of both the student and his counselor. It was hypothesized that these observed measures are indicators of a smaller set of underlying variables (factors, constructs, true scores). Confirmatory factor analysis techniques (Jöreskog 1969) were used to test whether the relationships between observed measures and their underlying factors are as supposed. When the correct structure was found, Jöreskog's technique yielded precise estimates of measurement error for each observed variable and of the correlations between the underlying variables corrected for these errors. This analysis procedure had a major advantage over previous analyses because the prior studies failed to consider measurement error despite the fact that measurement error is generally many times the size of the influences being studied (Werts and Hilton 1971).

This analysis often also clarifies the nature of the underlying constructs. It was found, for example, that the question which asks a student how much education he would "like" is measuring the same construct as the question on the education he "plans" to obtain, but with greater measurement error. A major value of this study was, then, its ability to estimate measurement error, to clarify underlying constructs, and to analyze relationships among variables corrected for measurement error. In taking this route, the present research started where Freeberg and Rock (1975) of ETS left off in their study of the NLS data.

Data

The questions included in our analysis were chosen by examining every item in the questionnaires to select those items which our survey of the literature had suggested might be relevant, as well as any items which on the basis of past experience in the area we thought might be of interest.

Since the NLS was not designed primarily as a study of persistence in higher education, a number of variables hypothesized to be relevant to persistence could not be included in the data collection. Thus, only a subset of the hypotheses listed previously were tested. However, the author's anticipation was that the advantages of the NLS data file (e.g., its longitudinal nature, large sample, and multiple measures) would outweigh this disadvantage.

The measures selected for analysis were, first, scores from the Vocabulary, Picture Number, Reading, Letter Groups, Mathematics, and Mosaic Comparisons tests that were given to the participating seniors. Then, items from the senior student questionnaire provided data on sex, course of study, self-estimated ability to do college work, high school grade average, hours worked outside of school, hours of homework, educational plans of closest friends, father's and mother's educational aspirations for the student, educational plans and education desired, frequency of discussion of plans with parents and friends, the influence of parents and friends on plans, father's and mother's education and occupation, family income, and race.

The school record information form for each student yielded data on percentile rank in class, adjusted high school grade average, and type of program.

The first follow-up questionnaire provided data on educational status in October 1972 and October 1973, the level of education the student thought he or she would attain, education he or she would like if there were no obstacles, type of college attended, portion of time spent as student, time to complete program enrolled in, hours worked, college grades, encouragement of friends and parents to continue education, and father's and mother's education.

Finally, the second follow-up questionnaire yielded data on educational status in October 1974, educational expectations, hours worked, college grades, full- or part-time student status, race, and number of siblings.

The full list of items selected for analysis appears in Appendix A. Examination of these items makes it clear that, although more comprehensive than in most studies of persistence, they by no means provide measures of all the variables cited above as possible determinants of persistence, especially those in the area of decision-making. The seriousness of this discrepancy will be discussed shortly.

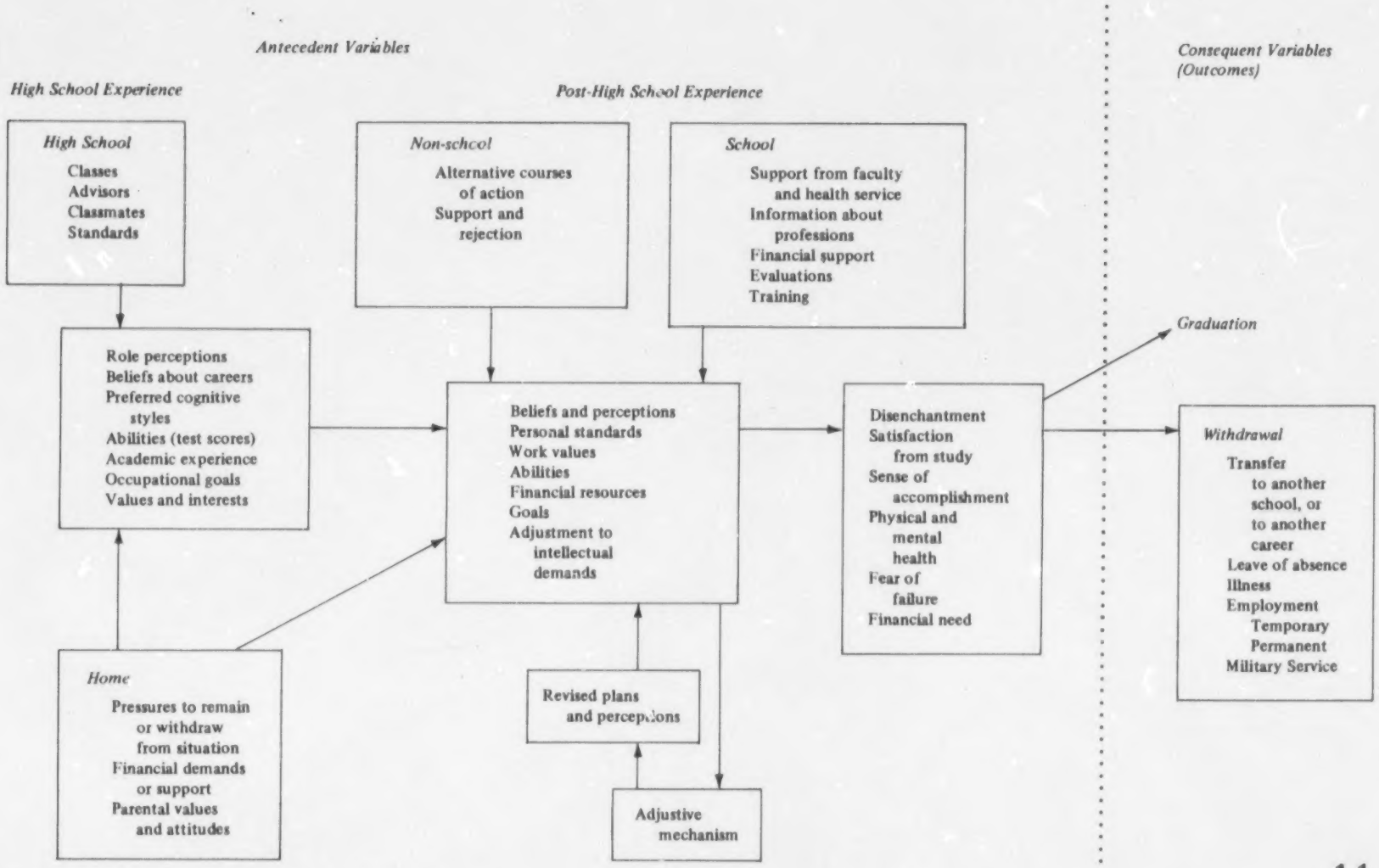


Figure 1. Schematic representation of student development

Dependent Variable

The focus of the study was on student persistence, i.e., the relationships of educational status and educational aspirations over time. The other variables were introduced because of their possible influence on persistence. Educational status was scored as a four-level variable for kind of school attended where 0 is none; 1 is vocational, trade, business, or other career training school; 2 is two-year junior or community college; and 3 is four-year college or university. The presence of this particular status variable over time allowed us to study influences on status and change in status simultaneously (Werts and Linn 1970a). In this way, the current study examined the determinants of entry into and withdrawal from educational institutions.

Analytical Considerations

The basic analytical tool for this analysis was that of path analysis[1] (Werts and Linn 1970b). This approach was recommended by Tinto (1975) as a means of isolating the independent effects of different factors in college atttrition using longitudinal data. Pantages and Creedon (1978) point out that this approach "is far more productive than the conventional cross-sectional investigation" (p. 53) and "will prove useful in making the investigator's hypotheses about the sequential determination of experiences explicit and internally consistent" (p. 55). However, Peng, Ashburn, and Dunteman (1976) argue that path analysis is not easily adapted for use with categorical dependent variables and does not easily allow for the study of interaction effects, for which reasons they used log-linear models. Fortunately for the purposes of the present analysis, these authors found that in most cases the interaction effects were not substantial. The limitation of log-linear models is that they are best applied to a smaller subset of variables than path analysis (and related techniques) because of insufficient cell frequencies with even a moderate number of independent variables. In addition, path analysis techniques are available (Jöreskog 1970) for dealing with multiple indicators of all variables and for estimating path coefficients among the underlying variables. (Thus, the coefficients are, in effect, corrected for measurement error.)

It is particularly important in a log-linear or regression approach to avoid using two or more measures of an independent variable since the resulting weights are quite meaningless. For example, if a father's education and family income are both indicators of social class, in regression analysis the regression coefficients will be uninterpretable: both will tend to have zero weight or one will be near zero and the other very high. However, path analysis techniques use multiple measures as a means of estimating measurement error and of correcting for it. Because measurement error is invariably much larger than the effects being studied in attrition research, it was concluded that path analysis is the technique of choice despite the limitations pointed out by Peng, Ashburn, and Dunteman (1976).

Confirmatory Factor Analyses

Confirmatory factor analysis (Jöreskog 1969) is used when the researcher has already obtained a certain amount of knowledge about the variables measured and wishes to test whether specific hypotheses are consistent with the data. The first step is to compute the variance-covariance matrix among the observed variables. For the first stage of the analysis this was done only for variables which apply to everyone (e.g., college grades were excluded because they apply only to college students).[2]

RESULTS

Descriptive Analyses

First, consider the patterns of persistence in higher education for students grouped by sex and race. Separate computations were first conducted for students who attended two-year colleges and students who attended four-year colleges, and then the two samples were pooled. The frequencies for the total sample are shown in Table 1. Twenty-six other figures for various combinations of sex, race, and type of college are shown in Appendix E.

In Table 1, "Status" refers to whether the student was enrolled in a two- or four-year college or not. As shown in the table, 41.7 percent of the total sample had no intention of continuing their education after high school and, in fact, did not. Another 6.3 percent (the sum of "History Types" 2 through 8) had no intention of continuing their education but, in fact, did—to varying degrees.

Of those who planned to continue their education, 7.8 percent did not. Another 2.5 percent postponed entrance for one or two years and then enrolled (Types 10, 11, 12). Of the balance, 6.8 percent enrolled for one year and then were not enrolled for the next two years (Type 13). These students along with Type 5 could be defined as the true dropouts as far as these data are concerned. Another 9.1 percent dropped out or "stopped out" either the second or third year. Finally, 24.7 percent intended to

1. In brief, path analysis is a method of investigating the causal structure of a set of variables by hypothesizing a theoretical model connecting the variables and then estimating the model by various means, frequently by computing standardized partial regression coefficients. (See Blalock, 1961, for a detailed description of the technique.)

2. Because there was considerable missing data on every variable, missing data was replaced by the mean of that variable before computing the variance-covariance matrix. Replacement of missing data by means has the effect of reducing observed correlations, but the pattern of relationships is relatively unaffected. Other procedures for dealing with missing data are possible, but this is the simplest way of obtaining a matrix which is suitable for maximum likelihood factor analysis.

Table 1. Frequencies for Different Patterns of College Attendance

SAMPLE: TOTAL

STATUS EXAMINED: ATTENDANCE AT 2 OR 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	6476	1144766.	41.7%
2	NO	NO	NO	YES	165	29561.	1.1%
3	NO	NO	YES	NO	113	19896.	0.7%
4	NO	NO	YES	YES	130	26527.	1.0%
5	NO	YES	NO	NO	234	42344.	1.5%
6	NO	YES	NO	YES	33	5619.	0.2%
7	NO	YES	YES	NO	134	23144.	0.8%
8	NO	YES	YES	YES	164	26967.	1.0%
9	YES	NO	NO	NO	1192	213766.	7.8%
10	YES	NO	NO	YES	152	27324.	1.0%
11	YES	NO	YES	NO	127	23533.	0.9%
12	YES	NO	YES	YES	224	44940.	1.6%
13	YES	YES	NO	NO	960	187185.	6.8%
14	YES	YES	NO	YES	316	62697.	2.3%
15	YES	YES	YES	NO	974	185512.	6.8%
16	YES	YES	YES	YES	3515	678717.	24.7%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				1774	301101.	(9.9% OF TOTAL SAMPLE)
ATTENDING	N	1536079.	1244864.	1053228.	917893.		
	%	50.5%	40.9%	34.6%	30.2%		
NOT ATTENDING	N	1507519.	1631751.	1822589.	1903036.		
	%	49.5%	53.6%	59.9%	62.5%		
STATUS UNKNOWN	N	0.	166983.	167782.	222669.		
	%	0.0%	5.5%	5.5%	7.3%		
TOTAL		3043598.	3043598.	3043598.	3043598.		

Table 2. Attendance at Two- and Four-Year Colleges by Race and Sex

History type	Percent of Total with Known Status			
	Black males	Black females	White males	White females
1 NNNN	46.8	45.3	37.5	43.5
2 NNNY	1.7	1.8	1.1	0.8
3 NNYN	0.4	1.9	0.9	0.3
4 NNYY	1.0	0.4	1.5	0.5
5 NYNN	1.5	2.0	1.8	1.2
6 NYNY	0.4	0.4	0.2	0.1
7 NYYN	1.4	1.9	0.9	0.6
8 NYYY	2.6	2.0	1.2	0.4
Subtotal	55.8	55.7	45.0	47.4
9 YNNN	10.7	11.6	7.0	8.0
10 YNNY	1.0	1.7	1.0	0.8
11 YNYN	0.6	1.1	1.0	0.7
12 YNYY	1.3	1.0	1.9	1.5
13 YYNN	6.3	4.2	7.3	7.2
14 YYNY	3.5	1.7	2.6	2.1
15 YYYN	5.4	4.4	6.8	7.2
16 YYYY	15.3	18.4	27.4	24.9
Subtotal	44.1	44.1	55.0	52.4
Actual *N*	729	1,063	5,665	5,789

Table 3. Percentage Comparisons, by Race, of Attendance Histories for Students Attending Two- and Four-Year Colleges

History type	Two-year colleges			Four-year colleges		
	Blacks	Whites	Total	Blacks	Whites	Total
1 NNNN	80.8	75.7	75.9	58.8	56.1	57.4
2 NNNY	1.7	0.9	1.1	2.1	3.1	3.0
3 NNYN	1.3	1.1	1.1	1.0	0.4	0.5
4 NNYY	0.4	0.7	0.8	0.4	1.0	0.9
5 NYNN	2.4	2.1	2.1	1.1	1.0	1.0
6 NYNY	0.2	0.1	0.1	0.2	0.2	0.2
7 NYYN	1.9	1.7	1.7	0.9	0.4	0.5
8 NYYY	0.8	0.5	0.6	1.8	1.2	1.3
Subtotal	89.5	82.8	83.4	66.3	63.4	64.8
9 YNNN	6.1	6.5	6.4	8.7	4.6	5.0
10 YNNY	0.3	0.3	0.3	0.9	1.1	1.1
11 YNYN	0.3	0.5	0.5	0.5	0.4	0.4
12 YNYY	0.1	0.4	0.4	1.0	1.2	1.2
13 YYNN	1.4	3.3	3.1	3.3	4.2	3.9
14 YYNY	0.2	0.3	0.3	2.0	1.7	1.6
15 YYYN	1.5	4.8	4.5	2.9	3.2	3.1
16 YYYY	0.5	1.1	1.2	14.5	20.1	19.0
Subtotal	10.4	17.2	16.6	33.8	36.5	35.3

continue their education and actually did, for at least the first three years.

Table 2 provides the same percentages for black males and females and white males and females. These percentages suggest the following generalizations:

1. A higher proportion of white students than black students plan to continue their education beyond high school (53.7 percent vs. 44.1 percent), and a higher proportion of white students actually do so (52.0 percent vs. 43.9 percent).
2. The rate of dropping out as a percentage of those who enrolled in the first year following high school (Types 5 and 13) does not differ appreciably for black students and white students (16.1 percent vs. 16.9 percent) or for male students and female students (16.4 percent vs. 16.7 percent).
3. The reported intentions and post-high-school histories of black males and black females are highly similar and are more similar to the reported intentions and history of white females than to those of white males.
4. Somewhat more white males than white females intended to continue their education (55.0 percent vs. 52.4 percent) and somewhat more white males actually continue their education without interruption (27.4 percent vs. 24.9 percent).

Comparison of Two- and Four-Year College Attendance

Table 3 was prepared to examine whether type of college, i.e., two-year or four-year, is related to attendance history, and, if so, whether the patterns differed for black and white students. In general, approximately twice as many students indicated that they intended to attend four-year rather than two-year colleges (35 percent vs. 17 percent). A higher proportion of white students than black indicated they intended to attend two-year colleges, but the proportions for four-year colleges did not differ appreciably. In fact, the proportions in general are quite similar for black and white students.

When dropouts are defined as students who attended the first year after high school but did not return in the next two years (Types 5 and 13), the dropout rates differ appreciably for two- and four-year colleges. More than twice as many students withdraw from two-year colleges (29.4 percent vs. 13 percent).

The dropout rates for black and white students at each type of school are remarkably similar: 29.0 percent vs. 30.3 percent for two-year colleges and 13.5 percent vs. 13.2 percent for four-year colleges.

Students who attend two-year colleges for two or three years or four-year colleges for at least the first three years might be called *continuous* students. This classification does not differ appreciably for black and white students except that slightly fewer black students attended four-year colleges continuously (14.5 percent vs. 20.1 percent). In general, however, there is little evidence to

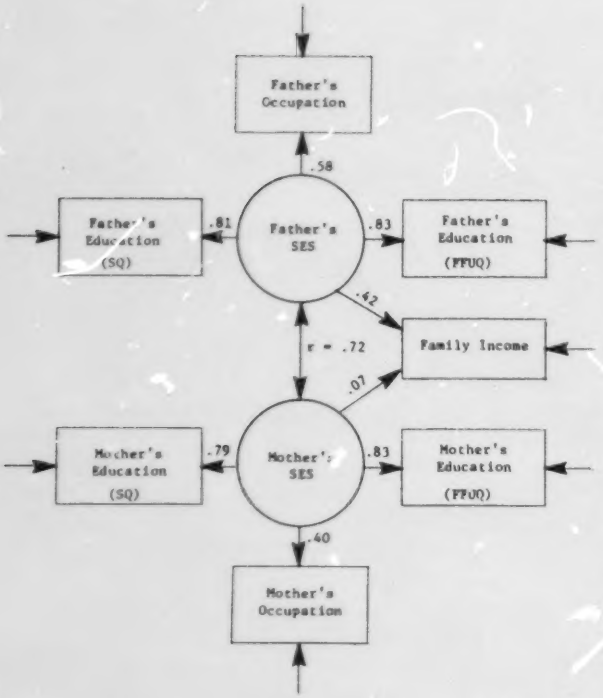


Figure 2. Model for socioeconomic status (SES) variables

suggest that one type of college or the other better serves the needs of either black or white students.

Model Development and Testing

Because of the large number of variables that were analyzed and the need to carefully hypothesize and test all relationships among variables, it was decided to start with relatively homogeneous groups of variables and, after building models for each of these groups, to combine these models into larger models. In this way, all the relationships could be examined but not an overwhelming number at any one time.

The first submodel considered is shown in Figure 2 and involves seven measures of social class from the Student Questionnaire (SQ) or the First Follow-up Questionnaire (FFUQ): father's education (SQ Item 90a), father's occupation (SQ 25b), family income (SQ 93), mother's education (SQ 90b), mother's occupation (SQ 25c), father's education (FFUQ 78a), and mother's education (FFUQ 78b). As shown in Figure 2, it was hypothesized that the three measures for father are indicators of father's true social class, the three measures for mother are indicators of mother's true social class, and family income is an indicator of both father's and mother's true social class. In Figure 2, observed measures are shown by squares, factors by circles; arrows indicate standardized factor loadings (path coefficients), and double headed arrows are correlations. The observed correlations among all measures are shown in Appendix B. For example, the correlation between father's education (SQ) and father's education (FFUQ) is .68 and between mother's education (SQ) and mother's education (FFUQ) is .64. Apparently students are not particularly consistent in reporting their parents' education, but they are slightly more consistent about reporting father's education than mother's (or they have more accurate information about it).

When the model shown in Figure 2 was tested by means of a confirmatory factor analysis program (Sörbom and Jöreskog 1976), it was found that the model provided an excellent fit to the data and was, therefore, not rejected.

Education appears to be the best measure of class status with factor loadings around .8. Mother's occupation is a poorer measure of her socioeconomic status (SES), probably because of an ambiguity in the mother's occupation item: since "housewife" was included as an occupation, students whose mothers worked outside the home were faced with an unclear choice about which option to check, particularly when the work was part time. Family income is much more a reflection of a father's SES but is not a good SES measure in any event, judging from its low factor loadings. We suppose that the correlations of .72 between father's and mother's social class reflects selective mating practices.

An important implication of this analysis is that the practice of combining father's and mother's data to attain a single social class measure, as has been done for most studies, throws away useful information. As will be shown, mother's SES has a significant effect independent of father's SES and, therefore, separately will predict student behavior better than any composite.

A second implication of this model is that family income, as reported by the student, appears to be a rather poor measure of social class. In fact, later results indicate that it is only to the degree that it is a measure of class that it correlates with student outcomes.

The second set of variables studied were those for academic ability: school-reported student's grade average (SSRI 1) and percentile rank in senior class (SSRI); self-reported high school grade average (SQ 5) and opinion on ability to complete college (SQ 28); and the six ability test scores (Vocabulary, Picture Number, Reading, Letter Groups, Mathematics, Mosaic Comparisons). The school-reported grade average (SSRI 1) was dropped from the analysis in the initial stages because it turned out to have only a low loading on the factors, probably because the grades were originally reported using the school's own system, and the NLS procedures apparently failed in their attempt to make grades for different systems comparable.

After several initial models were rejected because of poor fits to the data, the model shown in Figure 3 was found to fit and was not rejected. We have chosen to call "class standing" the factor underlying grade average and percentile rank partly because both indicators are relative measures of position.

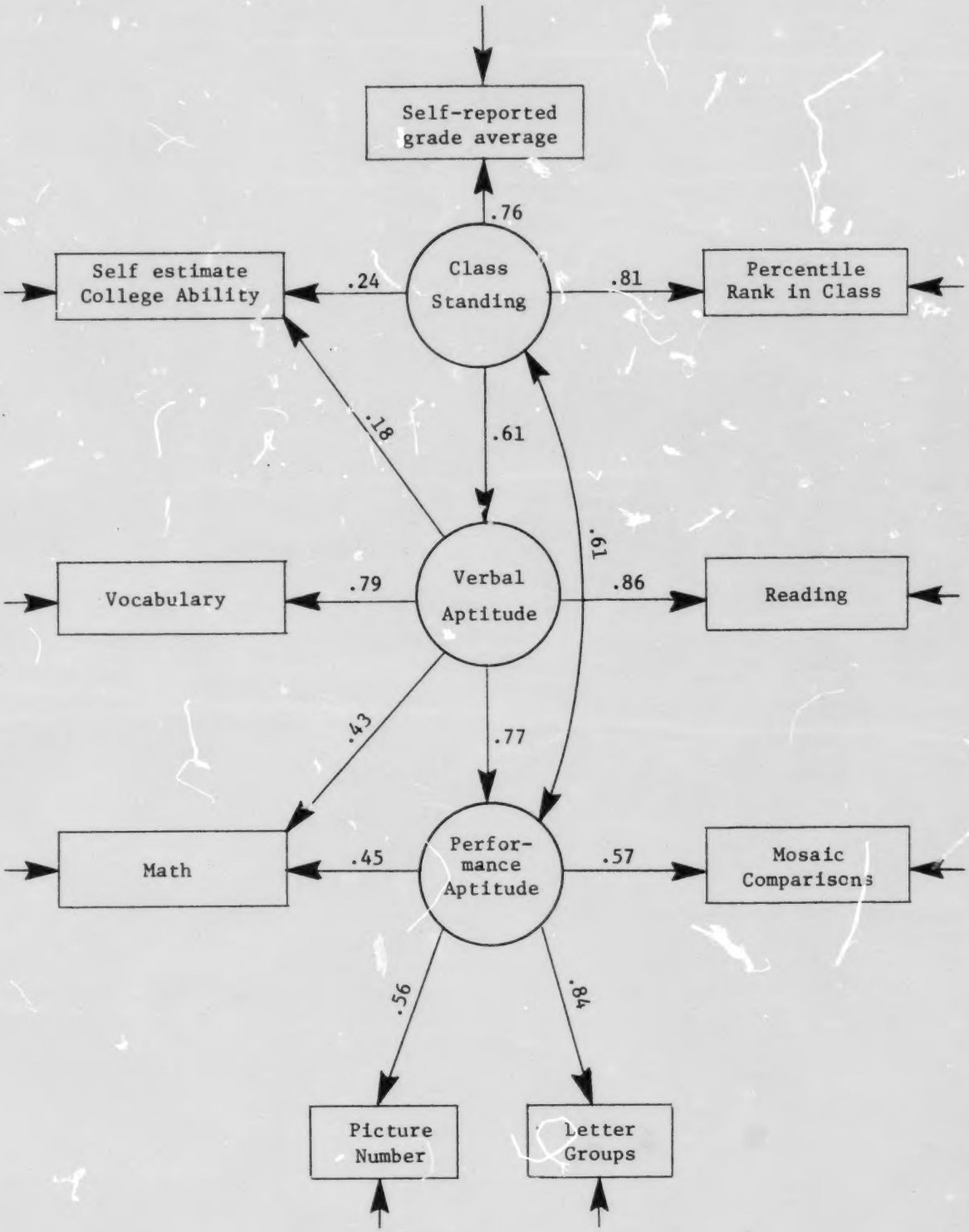


Figure 3. Model for academic ability measures

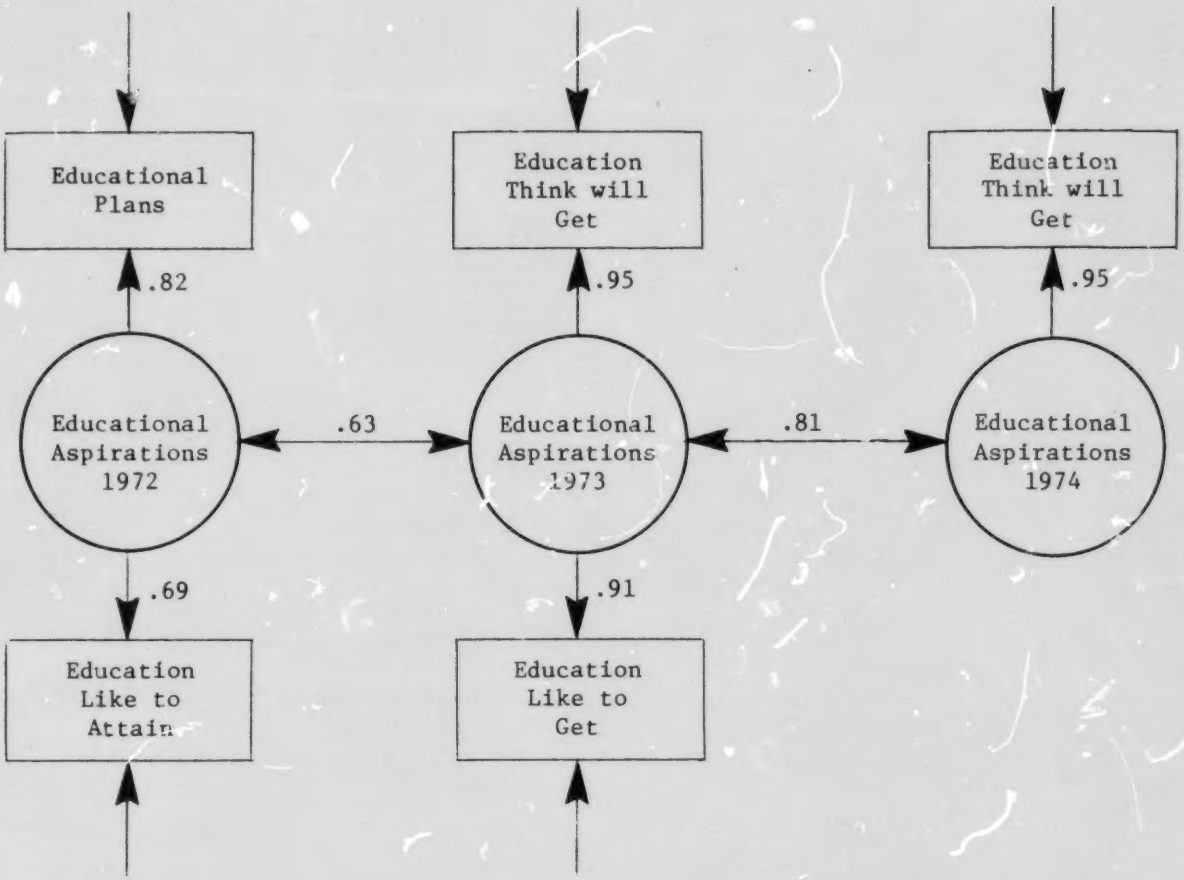


Figure 4. Model for educational aspirations

It is interesting to note that the two factors (verbal and performance aptitude) underlying the test scores are the traditional breakdown for the Wechsler-Bellevue tests corresponding roughly to the verbal-nonverbal distinction. We suppose that the mathematics test loads equally on both these factors because some reading skill is necessary to understand the mathematics problems.

Self-estimate of ability to complete college is a reflection of both the class standing and verbal factors, but not the performance aptitude factor. The later results indicate that only to the degree that this observation is true does self-estimate correlate with later behavior. The low factor loadings indicate that students have only very crude notions of their ability and that performance skills which presumably are relevant to engineering courses are not taken into consideration. The results of this particular analysis clearly indicate that it is inadequate to use a single composite ability measure as the NLS analyses have previously done. As will be demonstrated, the three factors in Figure 3 have differing relationships to other variables that would be obscured by such a composite.

The third set of variables analyzed were those involving educational aspirations and status at different points in time: in the spring of 1972 as reported in the Student Questionnaire (SQ); in the fall of 1972 and the fall of 1973, both reported in the First Follow-up Questionnaire (FFUQ) obtained in the fall of 1973; and in the fall of 1974 as reported in the Second Follow-up Questionnaire (SFUQ) obtained at that time. The variables included were: how much schooling your father (SQ 91a) and mother (SQ 91b) want you to get, the highest level of education you plan to attain (SQ 29b), how far in school you would like to get (SQ 29a, FFUQ 12), how far in school you think you actually will get (FFUQ 14), kind of school attended in October 1973 (FFUQ 26b), kind of school attended in October 1972 (FFUQ 32b), kind of school attended in October 1974 (SFUQ 12), and how far in school you think you actually will get (SFUQ 140).

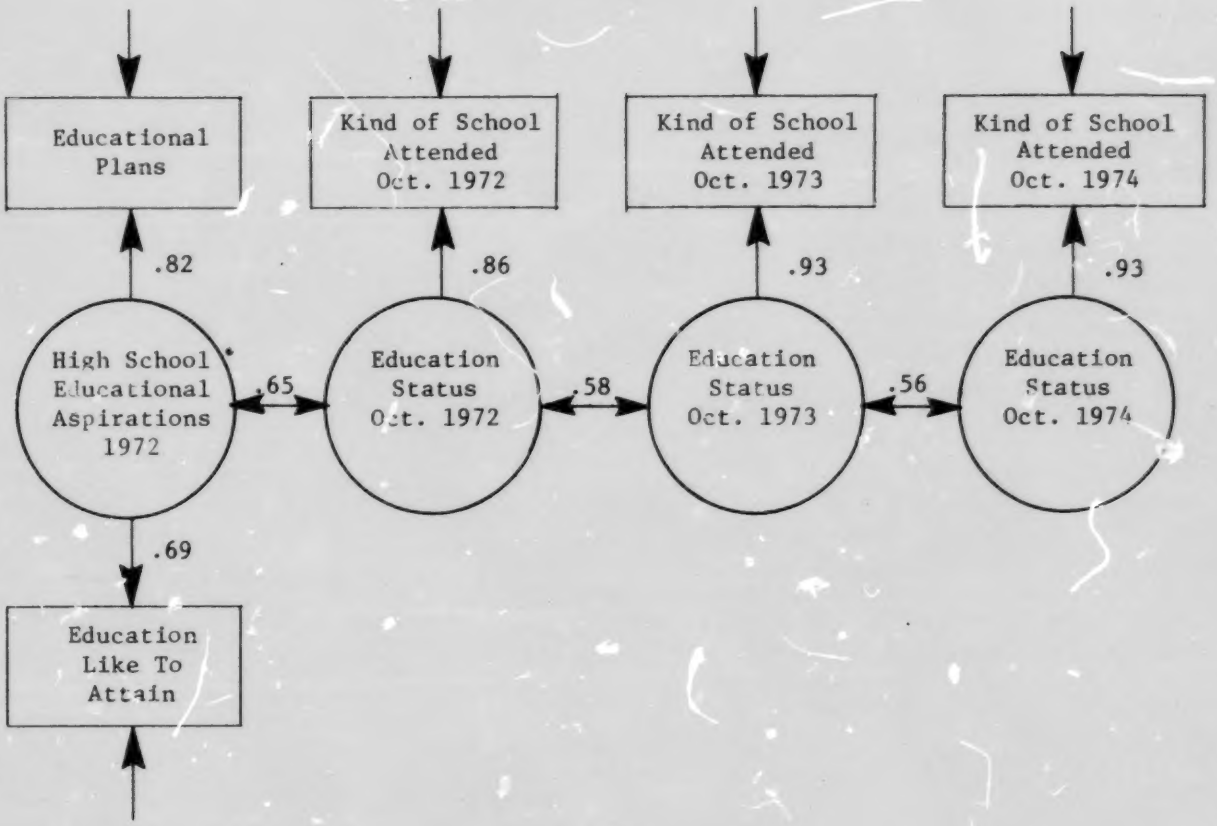


Figure 5. Model for educational status

As shown in Figure 4, the initial model involved educational plans and education desired. In this case, it was assumed that educational plans and education desired are both measures of educational aspirations. Since there was only a single measure of aspirations at the second follow-up in 1974, it was assumed that the factor loading would be the same as for the first follow-up in 1973 where the identical question was asked. It has been noted in previous research that plans are more correlated with the present model since plans, or education expected, has a higher loading than education desired. However, it should be noted that there is less difference between these loadings in 1973 than in 1972, suggesting increasing realism. The model in Figure 4 also provided a test of the hypothesis that the true correlation between the 1972 and 1974 aspirations is the product of the intervening true correlations (.63 times .81). The model was not rejected.

The theoretical implication of this last finding is that educational aspirations reflect a continuous process in which present aspirations develop from those of the past, and future aspirations develop from those of the present, i.e., past aspirations affect the future only insofar as they have affected the present state of aspirations. The logical analogy of this is a chain of causes in which A influences B, B influences C, but A does not influence C except insofar as it influences B, i.e., B is the sole mechanism by which A has an effect on C.

The same principle was used to good effect in the analysis of educational status as seen in Figure 5. In this case, kind of school attended in 1972, 1973, and 1974 are single variables with an unknown measurement error due to incorrect answers, clerical errors, failure to answer, etc. It was found that the data fit a model in which the correlations between nonadjacent factors in Figure 4 was equal to the product of intervening correlations, presumably for the same reasons that this was found for aspirations, i.e., progress through the educational system reflects a continuous process and the past influences the future only to the degree that it affects the present. This model has the advantage of allowing for estimates of measurement error except for the 1974 status question, which was assumed to have the same degree of error as 1973. This error seems to become less with time as seen from the corresponding factor loading increases of .86 to .93 from 1972 to 1973.

In the last step of this section, it was hypothesized that how much schooling the father and the mother want for the student both reflect a single factor called "perceived parental educational aspirations." The implication is that (as perceived by the student) there is a certain combined parental push for education which influences his or her behavior rather than separate influences of father and mother. This model fits the data well, yielding a loading of .89 for father and .91 for mother, and the underlying factor is quite distinct from the educational aspirations of the student.

In a series of stages, the submodels were combined to see if by introducing new variables, the structure of the simpler models would remain stable, and a larger consistent model could be developed. As part of this analysis, it was found that the factor loading for race was .93 for the 1972 question (SQ 84) and .88 for the parallel 1974 question (SFUQ 8). For this analysis the race question was scored white (0) vs. other (1), but the results indicated only a modest degree of error in answering the question.

The high school curriculum question was scored academic vs. other because of the ambiguity of the non-academic categories and it was found that the student self-report (SQ 2) had a loading of .72 and the school's report (SSRI 7) had a loading of .79. These results suggest that there is considerable disagreement between the student and his school as to whether he is pursuing an academic curriculum or not, which means that this crucial variable should definitely be corrected for measurement error in any analysis.

The combined model yielded some additional insights including the fact that the race factor also loads on family income because nonwhites have lower income than would be predicted from their social class status. In addition, it was found that student self-estimate of ability to finish college (SQ 28) also loaded on the educational aspirations factor, i.e., students who decided to go to college generally had a higher estimate of their ability to do college work than was predicted from their grades, class rank, test scores, social class, etc. However, the results do not indicate that these self-estimates have any predictive power except to the degree they reflect the underlying factors of class standing, verbal ability, and educational aspirations.

To this point, the analysis dealt with a total of 30 observed variables, the correlations among which are satisfactorily accounted for by 14 underlying factors. This analysis exhausts the variables for which the measurement error (estimated by the associated factor loading) can be estimated. The remaining variables contain measurement error, but we have no way of estimating how much and, therefore, must accept the very large analytical ambiguities which necessarily result. For the final stage in the confirmatory factor model, a total of 10 additional variables were used: sex (SQ 1), hours worked in high school (SQ 8), hours of homework in high school (SQ 7), educational plans of close friends (SQ 16), frequency of discussions of past high school plans with parents (SQ 13a) and with same age friends (SQ 13b), how much parents and friends influenced past high school plans (SQ 14a and SQ 14b), hours worked 1972-73 (FFUQ 50a, 56a, and 58a), encouragement from friends to continue in college since high school (FFUQ 77bc), encouragement from parents to continue in college (FFUQ 77ac), and hours worked 1973-74 (SFUQ 77 and 97).

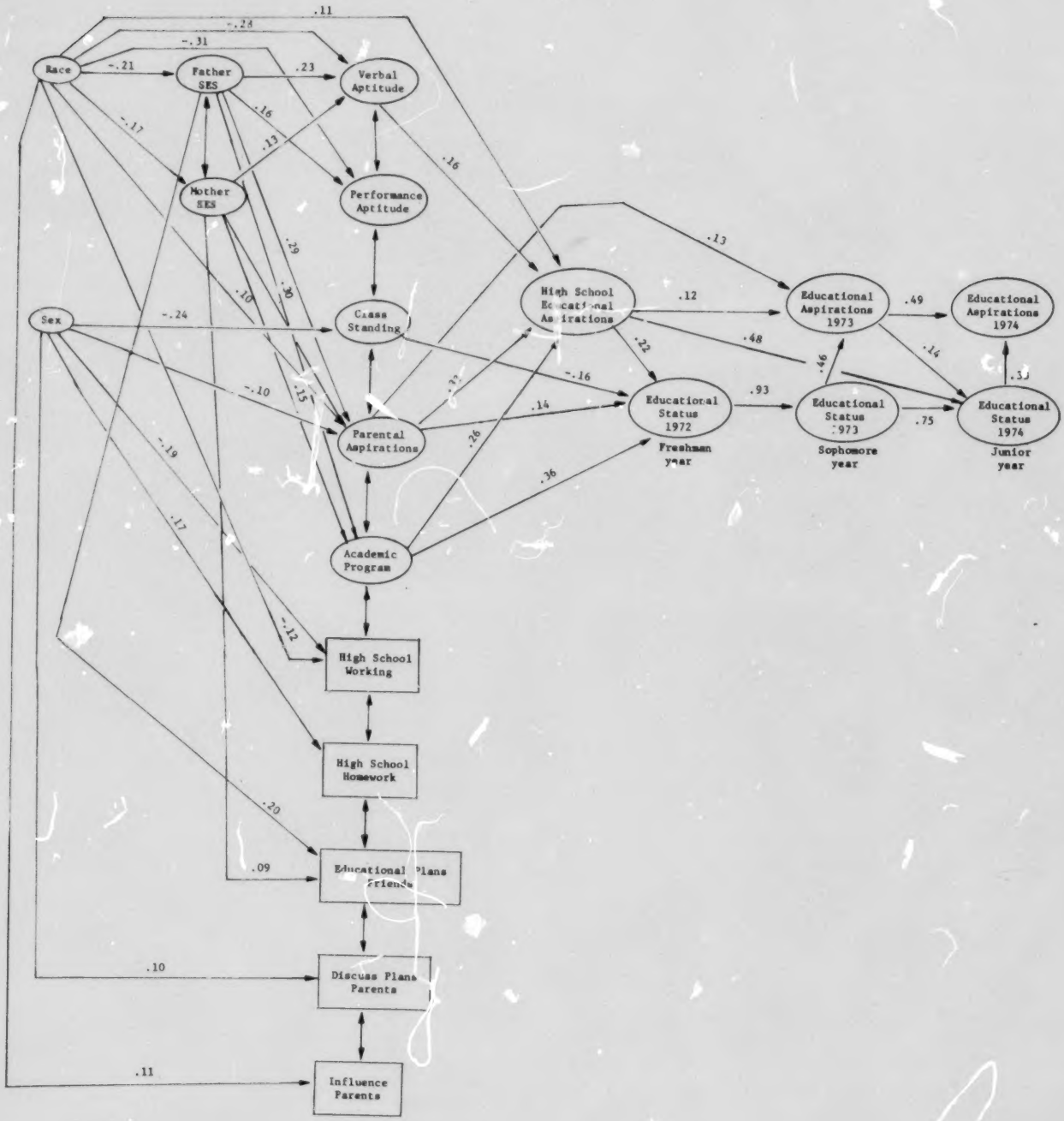
For this final factor model, each of these 10 additional variables was allowed to correlate with all 14 factors previously defined. Basically, the purpose was to see if the correlations of these 10 measures with the previous 30 observed measures (of those factors) could be totally accounted for by the relationships of all observed measures with the factors. For example, was the correlation of family income with hours worked 1972-73 totally accounted for by the correlations of both with the social class and race factors? This final factor model, in fact, provided a good fit to the observed correlations. The average discrepancy between the observed correlations and the correlations predicted by the model was approximately .02, and no large or inconsistent discrepancies were noted. All factor loadings given previously derive from this final model, not from intermediate stages. In Appendix C are listed the correlations among the 14 factors and the 10 additional variables. It is these correlations which provide the basis for the path analysis of influence, corrected for measurement error where this was possible. The correlation matrix among the 40 observed variables in given in Appendix B.

Path Analyses

The analysis, to this point, has produced a correlation matrix among 24 variables, corrected where possible for measurement error. In order to do a longitudinal path analysis using these variables, it was first necessary to provide a causal ordering which, *a priori*, specifies which variables are assumed to be influenced by and/or to influence other variables. In a longitudinal analysis, time of occurrence is the most useful tool in this regard since present events may be influenced by, but cannot influence, past events.

Causal priority is shown in Figure 6 by position from left to right. Variables may only influence other variables to the right of themselves in the diagram and may be influenced by those to the left. Variables in the same left-right position are correlated with each for unspecified reasons. It can be seen that race and sex are the most prior variables and, furthermore, are uncorrelated with each other.

Educational aspirations in high school were assumed to be influenced by all other high school variables, mostly to be consistent with prior studies; e.g., we would be hard put to prove that test scores taken at the same time influence but are not influenced by aspirations, nor could we be sure that parental expectations, at this time, do not



Note: Square indicates an observed variable and circle a factor. Only path coefficients greater than .12 are included, with the exception of those of unusual interest.

Figure 6. Final path diagram

really have a mutually interacting causal relationship with students' aspirations. Likewise, it was assumed that educational status in 1973 influences educational aspirations at the time, but it is difficult to be certain that there is not a more complex relationship between these variables.

The path diagram in Figure 6 excludes past high school work variables because the correlations with educational status are hard to interpret causally since those working typically are not in school and vice-versa. (Standardized path coefficients greater than .12 are shown in Figure 6 and the path coefficients for all variables are given in Appendix D.) The highlights of Figure 6 are:

1. Educational aspirations in high school are influenced directly by perceived parental expectations (.33), being in an academic program (.26), verbal ability (.16) and race (.11). In other words, verbal ability, parental expectations, high school program, and race are intervening variables that *totally* account for the correlation between social class and students' educational aspirations. The meaning of the latter coefficient is that nonwhites have higher educational aspirations even when all other variables are controlled (e.g., social class, academic ability, etc.). Father's and mother's social classes influence educational aspirations only insofar as they affect verbal ability, perceived parental educational expectations, and type of high school program.
2. Educational status in the first year after high school (i.e., in 1972 for these data) is directly affected by being in an academic program in high school (.36), aspiration in high school (.22), parental expectations (.14) and relative academic achievement in high school (-.16). Thus, much of the well-known correlation between high school aspirations and post-high school educational status appears to be due to the correlation of both with parental expectations and type of high school program.
3. Educational status in the second year after high school (1973) is very highly influenced by status in the first year (.93) *but by no other variable in this network.* Separate analyses for those students who went to college indicate that college grades are a moderate influence in that good grades lead to retention in college.
4. Educational aspirations in the second year are strongly influenced by educational status at this time (.46), somewhat by aspirations in high school (.12), parental expectations in high school (.13) and by parental encouragement since high school (.12). These results suggest some continuity of educational aspirations that is unrelated to actual educational progress. It is interesting that parental influences affected aspirations rather than status in 1973, implying that changes in educational status for 1972 to 1973 were not influenced by parents but that aspirations for the future were.
5. Educational status in the third year after high school (1974) is most influenced by educational status in the second year (.75) and much less so by educational aspirations in the second year (.14). Surprisingly, high school aspirations also influences third year status (.48) even though it did not influence second year status. The suggestion is that some students "stopped out" in their second year regardless of their high school aspirations.
6. Aspirations in the third year are moderately influenced by second year aspirations (.49) and by third year status (.33). Again, a separate analysis of college students indicates grades exercise a moderate effect on retention.

In concluding this section, it must again be emphasized that the term "influences" is used only within the context of this analysis. With a different set of variables, different findings might emerge. No unqualified conclusions about causality are warranted from this or any other analyses presently available.

Variables such as race, sex, socioeconomic status, hours worked, public or private college, full- or part-time attendance, and length of program enrolled in were not found to affect persistence. In a sense, these results are disappointing in that no determinants of persistence in college were found except for college grades (which is well known). The strong suggestion is that other studies reporting significant relationships between variables such as parents' socioeconomic status and persistence in higher education have fallen prey to spurious correlations, that they reached erroneous conclusions because they lacked a model containing a large number of variables corrected for attenuation.

DISCUSSION AND CONCLUSION

The examination of the patterns of attendance for the total sample supported the generalization that has been widely reported in the current literature. the practice of "stopping out" is common. Only about 25 percent of contemporary students enter college immediately after high school graduation and continue to attend without interruption. This observation was not a surprise. We were surprised, however, when major subgroups of the total sample were examined. Contrary to past studies, the patterns of attendance for black students and white students and for male and female students were, in general, quite similar. The dropout rates for these major groups were especially similar, being between 16 and 17 percent in all cases. These findings would seem to reflect social progress in this country.

The results for two- and four-year colleges are more consistent with past studies. The dropout rate for two-

year colleges is approximately twice that of four-year colleges, perhaps because—as proposed by Clark (1960)—two-year-college attendance tends to be viewed as relatively low-cost exploration by the student. The author had expected this to be especially true of black students, but the patterns of attendance for black students are highly similar to those of white students.

The more important part of the analysis in terms of time and budgetary expenditure was the path analysis of a broad set of variables hypothesized to be related to student development and thus to persistence in higher education. A prior question, however, is: Why perform the path analysis at all when it is known that the available set of variables is not complete? This means that the path coefficients obtained with the present data may be quite different from those that would be obtained from a complete data set. Path analysis assumes that all influences on a given variable either are in the analysis or are uncorrelated with all the influencing variables in the model. In this case neither assumption is likely to be tenable. As noted earlier, certain crucial variables are known to be missing, and these missing variables are almost certainly correlated with the variables in the data. This criticism is as much valid for this study as it is for others which used log-linear procedures, probability tables, or regression analysis. And most studies use far fewer variables than this one. In the opinion of the author, the main justification for the present analysis is that it helps organize the results in a way that facilitates comparisons with previous studies using similar methods, and it suggests possibilities that can be considered in future studies.

In doing this analysis, we were fully cognizant of the large number of assumptions being made, many of which may in the future be proven false. Three such assumptions are: (1) only one-way causation is assumed (e.g., A influences B and not vice versa); (2) the effects of different influences are assumed to be additive, whereas it is possible that some effects depend on the existence of certain conditions (i.e., a conditional probability rather than a linear additive model is appropriate); and (3) all relationships are linear (i.e., a specified increase in influence A always results in a specified increase in B at all points on the scale).

The basic problem is that our knowledge about causation in this area is so deficient that we are in no position to decide which assumptions are realistic and which are not. We have ended up, therefore, using an analytical model that may be seriously incomplete. For these reasons, we would consider it premature to offer advice to students on the basis of any of the presently available studies, with one possible exception. This exception concerns the relatively strong relationship between high school program and educational status in the fall following high school graduation. Enrollment in an academic or college preparatory program is, not surprisingly, quite strongly associated with college attendance the following fall. The indication is that enrollment in the academic or college preparatory curriculum substantially increases the probability of college attendance, but note that such enrollment is influenced by parents' SES.

Perhaps of most interest are the variables that appear not to influence retention when other causative variables are, in effect, held constant. Especially notable is the absence of evidence that race has an independent effect on college retention when steps are taken to correct for error of measurement and to partial out the influence of other correlated variables, and similarly the lack of evidence that SES has any effect other than its *indirect* effect on the students' perception of their parents' aspirations and on their choice of curriculum.

It is of interest that Peng and Fetters (1978) conducted a similar study based on the same data but came to slightly different conclusions. Unlike the present study, they defined a two-level variable (persist or not) and relied on multiple regression techniques instead of hypothesizing factors underlying the observed variables. As a result they found a larger number of variables that, they concluded, directly influenced withdrawing, but in almost all cases the strength of the relationship was substantially less than in the present study. They also concluded that academic ability, race, and sex had little direct effect on persistence (except for sex, in two-year colleges, where females are more likely to withdraw than male students). The effect of high school curriculum was observed by Peng and Fetters but not nearly to the same extent as in the present study. The author's conclusion is that the more complex, multistage structural analysis of the present study yielded more informative estimates of the magnitude of effects and of the probable causation than did the conventional multiple regression analysis by Peng and Fetters.

Recommendations for Future Research

Withdrawing from college is not necessarily an undesirable career development for an individual. It may represent the rational outcome of carefully planned exploration and equally careful weighing of the personal value of continuing in college relative to the value of alternative career paths. In some significant fraction of withdrawals, however, the act represents an individual defeat, a failure of the student to achieve a highly desired personal goal. Assuming that this is the case for many students, probably numbering in the thousands, and considering the decline in enrollments expected in the next decade (and thus an increased need to maintain enrollments), the author proposes that research on the causes of withdrawal from higher education continues to deserve priority.

The question is: How can studies be designed and conducted in such a way as to yield results with practical implications for both students and institutions of higher education? The author had high hopes for the data file of the National Longitudinal Study and for path analysis as a methodology. The data file meets many of the require-

ments of a study of persistence: it is national in scope, longitudinal, large in number (over 18,000 subjects), and includes a broad range of measures for each individual participant.

The problem, as noted earlier in this paper and by other authors, is that persistence is an extremely complex case of multicausation. Few students abandon higher education for a single reason, and few students do so for the same set of reasons. To encompass all the possible reasons for dropping out, we will require an even more comprehensive data file than that provided by the NLS. Measurement of situational variables that will permit estimation of the congruence between the needs of the individual student and the psychological environment of the college setting will be particularly important. Assembling such data on a sample large enough to permit sophisticated multivariate analysis will be a huge undertaking, so huge, in fact, that it may not be feasible to conduct the study. In view of this, the author recommends that alternative research strategies be given careful consideration. The alternatives include—but are not limited to—(1) true experiments wherein supposed causative variables would be systematically varied, (2) case studies, and (3) computer simulations of the persistence process. Although widely used in economic and industrial research, the full potential of simulations in studying student development has never been explored. Any departures from traditional survey research approaches to the study of persistence will require substantial financial expenditure, but given the importance of the problem, the effort should not be long postponed.

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Appendix A. Questionnaire Items Included in the Analysis

I. Items from 1972 Student Questionnaire (SQ)

1. Sex

(Circle one.)

Male 1
Female 2

2. Which of the following best describes your present high school program?

(Circle one.)

General 1
Academic or college preparatory 2
Vocational or technical:
- Agricultrual occupations 3
- Business or office occupations 4
- Distributive education 5
- Health occupations 6
- Home economics occupations 7
- Trade or industrial occupations 8

(Recoded 3, 4, 5, 6, 7, 8 to 1)

5. Which of the following best describes your grades so far in high school?

(Circle one.)

Mostly A (a numerical average of 90-100) 1
About half A and half B (85-89) 2
Mostly B (80-84) 3
About half B and half C (75-79) 4
Mostly C (70-74) 5
About half C and half D (65-69) 6
Mostly D (60-64) 7
Mostly below D (below 60) 8

7. Approximately what is the average amount of time you spend on homework a week?

(Circle one.)

No homework is ever assigned 1
I have homework but don't do it 2
Less than 5 hours a week 3
Between 5 and 10 hours a week 4
More than 10 hours a week 5

8. On the average over the school year, how many hours per week do you work in a paid or unpaid job? (Exclude vacations.)

(Circle one.)

None 0
Less than 6 hours 1
6 to 10 hours 2
11 to 15 hours 3
16 to 20 hours 4
21 to 25 hours 5
26 to 30 hours 6
More than 30 hours 7

13. How often have you discussed your plans for high school with the following people?

(Circle one number on each line.)

	Never	*Seldom*	*Often*
a. Your parents	1	2	3
b. Friends your own age	1	2	3

14. How much has each of the following persons influenced your plans for after high school?

(Circle one number on each line.)

	Not at all	*Somewhat*	*A great deal*
a. Your parents	1	2	3
b. Friends your own age	1	2	3

16. What do most of your close friends plan to do next year?

(Circle one.)

Enter the military service 1
Go to vocational, technical, business, or trade schools 2
Become full-time homemakers 3
Go to college 4
Enter apprenticeships or on-the-job training programs 5
Go to work full-time 6
I don't know 7
Other 8

(Recoded 1, 3, 5, 6, 7, 8 to 0)

25b. Under FATHER, circle the one number that best describes the work done by your father (or male guardian). The exact job may not be listed but circle the one that comes closest. If your parent is out of work, disabled, retired, or deceased, mark the kind of work that he used to do.

Father

CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent 01
CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter 02
FARMER, FARM MANAGER 03
HOMEMAKER OR HOUSEWIFE 04
LABORER such as construction worker, car washer, sanitary worker, farm laborer 05

Father

MANAGER, ADMINISTRATOR such as sales manager, office manager, school administrator, buyer, restaurant manager, government official 06
MILITARY such as career officer, enlisted man or woman in the armed forces 07
OPERATIVE such as meat cutter; assembler; machine operator; welder; taxicab, bus, or truck driver; gas station attendant 08
PROFESSIONAL such as accountant, artist, clergyman, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, writer, scientist, social worker, actor, actress 09
PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner 10
PROTECTIVE SERVICE such as detective, policeman or guard, sheriff, fireman 11
SALES such as salesman, sales clerk, advertising or insurance agent, real estate broker 12
SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter 13
TECHNICAL such as draftsman, medical or dental technician, computer programmer 14

(Recoded 25b. to Duncan Scale as given in Freeberg and Rock (1975))

25c. Under MOTHER, circle the one number that best describes the work done by your mother (or female guardian). The exact job may not be listed but circle the one that comes closest. If your parent is out of work, disabled, retired, or deceased, mark the kind of work that she used to do.

Mother

CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent 01
CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter 02
FARMER, FARM MANAGER 03
HOMEMAKER OR HOUSEWIFE 04
LABORER such as construction worker, car washer, sanitary worker, farm laborer 05
MANAGER, ADMINISTRATOR such as sales manager, office manager, school administrator, buyer, restaurant manager, government official 06
MILITARY such as career officer, enlisted man or woman in the armed forces 07
OPERATIVE such as meat cutter; assembler; machine operator; welder; taxicab, bus, or truck driver; gas station attendant 08
PROFESSIONAL such as accountant, artist, clergyman, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, writer, scientist, social worker, actor, actress 09
PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner 10
PROTECTIVE SERVICE such as detective, policeman or guard, sheriff, fireman 11
SALES such as salesman, sales clerk, advertising or insurance agent, real estate broker 12

Mother

SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter 13
TECHNICAL such as draftsman, medical or dental technician, computer programmer 14

(Recoded 25c. to Duncan Scale as given in Freeberg and Rock (1975))

28. Whatever your plans, do you think you have the ability to complete college?

(Circle one.)

Yes, definitely 1
Yes, probably 2
Not sure 3
I doubt it 4
Definitely not 5

29a. To answer this question, circle one number for the highest level of education you would like to attain.

Would like to attain

Less than high school graduation 1
Graduate from high school but not go beyond that 2
Graduate from high school and then go to a vocational, technical, business, or trade school 3
Go to a junior college 4
Go to a four-year college or university 5
Go to a graduate or professional school *after college* 6

29b. To answer this question, circle one number for the highest level you plan to attain.

Plan to attain

Less than high school graduation 1
Graduate from high school but not go beyond that 2
Graduate from high school and then go to a vocational, technical, business, or trade school 3
Go to a junior college 4
Go to a four-year college or university 5
Go to a graduate or professional school *after college* 6

84. How do you describe yourself?

(Circle one.)

American Indian 1
Black or Afro-American or Negro 2
Mexican-American or Chicano 3
Puerto Rican 4
Other Latin-American origin 5
Oriental or Asian-American 6
White or Caucasian 7
Other 8

(Recoded 1, 2, 3, 4, 5, and 8 as 6)

90a. What was the highest educational level each of the following persons completed? If you are not sure, please give your best guess.

	Father or male guardian
Doesn't apply	1
Did not complete high (secondary) school	2
Finished high school or equivalent	3
Adult educational program	4
Business or trade school	5
Some college	6
Finished college (four years)	7
Attended graduate or professional school (for example, law or medical school), but did not attain a graduate or professional degree	8
Obtained a graduate or professional degree (for example, M.A., Ph.D., or M.D.)	9

(Recoded 1 as missing data for 90a.)

90b. What was the highest educational level each of the following persons completed? If you are not sure, please give your best guess.

	Mother or female guardian
Doesn't apply	1
Did not complete high (secondary) school	2
Finished high school or equivalent	3
Adult education program	4
Business or trade school	5
Some college	6
Finished college (four years)	7
Attended graduate or professional school (for example, law or medical school), but did not attain a graduate or professional degree	8
Obtained a graduate or professional degree (for example, M.A., Ph.D., or M.D.)	9

(Recoded 1 as missing data for 90b.)

91a. As far as you know, how much schooling does your father (or guardian) want you to get?

	Father or male guardian
Wants me to quit high school without graduating	1
Wants me to graduate from high school and stop there	2
Wants me to graduate from high school and then go to a vocational, technical, trade, or business school	3
Wants me to go to a two-year or junior college	4
Wants me to go to a four-year college or university	5
Wants me to go to a graduate or professional school after graduating from four-year college or university	6
I don't know	7

(Recoded 7 as missing data)

91b. As far as you know, how much schooling does your mother (or guardian) want you to get?

	Mother or female guardian
Wants me to quit high school without graduating	1
Wants me to graduate from high school and stop there	2
Wants me to graduate from high school and then go to a vocational, technical, trade, or business school	3
Wants me to go to a two-year or junior college	4
Wants me to go to a four-year college or university	5
Wants me to go to a graduate or professional school after graduating from four-year college or university	6
I don't know	7

(Recoded 7 as missing data)

93. What is the approximate income before taxes of your parents (or guardian)? Include taxable and nontaxable income from all sources.

(Circle one.)

Less than $3,000 a year (about $60 a week or less)	01
Between $3,000 and $5,999 a year (from $60 to $119 a week)	02
Between $6,000 and $7,499 a year (from $120 to $149 a week)	03
Between $7,500 and $8,999 a year (from $150 to $179 a week)	04
Between $9,000 and $10,499 a year (from $180 to $209 a week)	05
Between $10,500 and $11,999 a year (from $210 to $239 a week)	06
Between $12,000 and $13,499 a year (from $240 to $269 a week)	07
Between $13,500 and $14,999 a year (from $270 to $299 a week)	08
Between $15,000 and $18,000 a year (from $300 to $359 a week)	09
Over $18,000 a year (about $360 a week or more)	10

II. Total Test Scores from Student Test Book

1. Vocabulary
2. Picture Number
3. Reading
4. Letter Groups
5. Mathematics
6. Mosaic Comparisons

III. Items from Student School Record Information (SSRI)

Percentile rank in senior class computed from rank in class divided by total number in senior class.

Adjusted high school grade average computed from Question 1 with adjustment for rank.

1. What is the student's overall academic average? (Use whichever grading system is used by your school.)

Grading system	*(Circle one.)*	*Student's average*	*School's grade scale* — *Lowest possible*	*School's grade scale* — *Highest possible*
Average letter grade	1			
Percentage grade average	2			
Grade-point (numerical grade) average	3	———	———	———
Other	4			

7. Which of the following most closely describes this student's course of study?

(Circle one.)

General	1
Academic or college preparatory	2
Vocational-technical:	
Agricultural occupations	3
Business or commercial occupations	4
Distributive education	5
Health occupations	6
Home economics occupations	7
Trade or industrial occupations	8

(Recoded 3, 4, 5, 6, 7, 8 to 1)

IV. Items from First Follow-Up Questionnaire (FFUQ)

12. How far in school would you *like* to get?

(Circle one.)

High school only		1
Vocational, trade, or business school	Less than two years	2
	Two years or more	3
College program	Some college (including two-year degree)	4
	Finish college (four- or five-year degree)	5
	Master's degree or equivalent	6
	Ph.D., M.D., or equivalent	7

14. As things stand now, how far in school do you think you actually *will* get?

(Circle one.)

High school only		1
Vocational, trade, or business school	Less than two years	2
	Two years or more	3
College program	Some college (including two-year degree)	4
	Finish college (four- or five-year degree)	5
	Master's degree or equivalent	6
	Ph.D., M.D., or equivalent	7

26b. What kind of school is this?

(Circle one.)

Vocational, trade, business or other career training school	1
Junior or community college (two-year)	2
Four-year college or university	3
Other (please describe: _____)	4

(Recoded 4 or missing data to 0)

26c. Is this school public or private?

Public	1
Private	2

27b. During the *first week of October 1973*, were you classified by this school as a full-time student?

Yes	1
No	2

28c. How long does it normally take to complete this program?

(Circle one.)

Less than three months	1
Three to five months	2
Six to eleven months	3
One to two years	4
More than two years	5

32b. What kind of school is this?

(Circle one.)

Vocational, trade, business or other career training school	1
Junior or community college (two-year)	2
Four-year college or university	3
Other (please describe: _____)	4

(Recoded 4 or missing data to 0.)

32c. Is this school public or private?

Public 1
Private 2

33b. During *October 1972*, were you classified by this school as a full-time student?

Yes 1
No 2

36c. How long does it normally take to complete this program?

(Circle one.)

Less than three months 1
Three to five months 2
Six to eleven months 3
One to two years 4
More than two years 5

41a. *Since leaving high school* which of the following best describes how well you have done in all of your course-work or training *through October 1973?* If your school(s) or program(s) do not use letter grades, please choose the letter grade that comes *closest* to describing your progress.

(Circle one.)

Mostly A 1
About half A and half B 2
Mostly B 3
About half B and half C 4
Mostly C 5
About half C and half D 6
Mostly D 7
Mostly below D 8

44a. Between the time you left high school and October 1973, had you participated in a formal program of academic or career counseling, tutoring, or remedial courses *other than* those services that were provided to *all* students in your college, school or training area?

(Circle one.)

Never heard of such a program 1
Have heard of such a program but have not participated 2
Yes 3

(Recoded 1 and missing data to 2)

50a, 56a, and 58a. Approximate hours worked 1972 to 1973.

50a. How many hours per WEEK did you usually work at this job up through the *first week of October 1973?*

_____ Hours per week

56a. How many hours per WEEK did you usually work at this job in *October 1972*?

_____ Hours per week

58a. Each part of this question refers to the entire 52-week period *from October 1972 to October 1973.*

About how many different weeks did you work altogether during this period? (Count all weeks in which you did any work at all or were on paid vacation.)_____ Number of weeks

(Recoded to score equal to 1/2 (50a + 56a) 58a)

77. Have your (a) *parents or guardians* encouraged or discouraged you in doing the following things since you left high school?

(a) PARENTS OR GUARDIANS
(Circle one number on each line.)

En-couraged	*Dis-couraged*	*Both*	*Neither*	
1	2	3	4	Getting a job or going to work
1	2	3	4	Going to school for vocational or technical training
1	2	3	4	Going to college for an academic education
1	2	3	4	Getting married
1	2	3	4	Entering the Armed Forces
1	2	3	4	Traveling or taking a break

FFUQ77ac

(Recoded 3 and 4 to 1.5)

77. Have your (b) *friends your own age* either encouraged or discouraged you in doing the following things since you left high school?

(b) FRIENDS YOUR OWN AGE
(Circle one number of each line.)

		Encouraged	*Discouraged*	*Both*	*Neither*
FFUQ77bc	Getting a job or going to work	1	2	3	4
	Going to school for vocational or technical training	1	2	3	4
	Going to college for an academic education	1	2	3	4
	Getting married	1	2	3	4
	Entering the Armed Forces	1	2	3	4
	Traveling or taking a break	1	2	3	4

(Recoded 3 and 4 to 1.5)

78. What is the highest educational level completed by your mother and father? If you are not sure, please give your best guess.

(Circle one number on each line.)

	None or grade school only	*High School*		*Vocational, trade, business, or career program in a school or college*		*Academic programs*			
		Did not finish	*Finished*	*Less than two years*	*Two years or more*	*Some college (including two-year degree)*	*Finished college (four- or five-year degree)*	*Master's degree or equivalent*	*Ph.D., M.D., or equivalent*
a. Father or male guardian	1	2	3	4	5	6	7	8	9
b. Mother or female guardian	1	2	3	4	5	6	7	8	9

V. Items from Second Follow-Up Questionnaire (SFUQ)

8. How do you describe yourself?

(Circle one.)

American Indian	1
Black or Afro-American or Negro	2
Mexican-American or Chicano	3
Puerto Rican	4
Other Latin-American origin	5
Oriental or Asian-American	6
White or Caucasian	7
Other	8

12. What kind of school is this?

(Circle one.)

Vocational, trade, business, or other career training school	1
Junior or community college (two-year)	2
Four-year college or university	3
Other (describe:_____)	4

(Recoded 4 and missing data to 0)

16. During the *first week of October 1974*, were you classified by this school as a full-time student?

Yes	1
No	2
Don't know	3

(Recoded 3 to 1.5)

22. How long does it normally take one to complete this program of studies from beginning to end?

(Circle one.)

Less than one year	0
One year	1
Two years	2
Three years	3
Four years	4
More than 4 years	5

39. which of the following best describes how well you have done in all of your coursework or program from *October 1973 through October 1974?* If your school(s) or program(s) do not use letter grades, please choose the letter grade that comes closest to describing your progress.

(Circle one.)

Mostly A	1
About half A and half B	2
Mostly B	3
About half B and half C	4
Mostly C	5
About half C and half D	6
Mostly D or below	7

77. How many hours did you usually work at this job in an average week?

_____Hours per week

97. During the entire 52-week period from *October 1973 to October 1974,* about how many weeks did you work altogether? (Count all weeks in which you did any work at all or were on paid vacation.)

_____Number of weeks

119. How many brothers do you have?

(Circle one number on each line.)

a. Older brothers	0	1	2	3	4	5 or more
b. Younger brothers	0	1	2	3	4	5 or more

120. How many sisters do you have?

(Circle one number on each line.)

a. Older sisters	0	1	2	3	4	5 or more
b. Younger sisters	0	1	2	3	4	5 or more

(Number of siblings equals [119a + 119b + 120a + 120b].)

140. As things stand now, how far in school do you think you actually will get?

(Circle one.)

High school only		1
Vocational, trade, or business school	Less than two years	2
	Two years or more	3
College program	Some college (including two-year degree)	4
	Finished college (four- or five-year degree)	5
	Master's degree or equivalent	6
	Ph.D., M.D., or equivalent	7

Appendix B. Variables in Correlation Matrix among Observed Variables

1. Academic program, self report (SQ 2)
2. Academic program, school report (SSRI 7)
3. Self-reported opinion of ability to complete college (SQ 28)
4. Self-reported high school grade average (SQ 5)
5. Percentile rank in senior class (SSRI)
6. Vocabulary
7. Picture number
8. Reading
9. Letter Groups
10. Mosaic comparisons
11. Mathematics
12. How much schooling your father wants you to get (SQ 91a)
13. How much schooling your mother wants you to get (SQ 91b)
14. Highest level of education you plan to attain (SQ 29b)
15. Highest level of education you would like to attain (SQ 29a)
16. Father's education (SQ 90)
17. Father's occupation (SQ 25b)
18. Father's education (FFUQ 78a)
19. Family income (SQ 93)
20. Mother's occupation (SQ 90b)
21. Mother's occupation (SQ 25c)
22. Mother's education (FFUQ 78b)
23. Race (SQ 84)
24. Race (SFUQ 8)
25. How far in school think actually will get (FFUQ 14)
26. How far in school like to get (FFUQ 12)
27. How far in school think actually will get (SFUQ 140)
28. Kind of school attended October, 1972 (FFUQ 32b)
29. Kind of school attended October, 1973 (FFUQ 26b)
30. Kind of school attended October, 1974 (SFUQ 12)
31. Sex (SQ 1)
32. Hours worked in high school (SQ 8)
33. Hours of homework in high school (SQ 7)
34. Educational plans of close friends (SQ 16)
35. Frequency of discussion of plans with parents and friends (SQ 13a)
36. Influence on educational plans by parents (SQ 14)
37. Hours worked 1972-73 (FFUQ 56a, 50a, and 58a)
38. Friends' encouragement to attend college (FFUQ 77c)
39. Parental encouragement to attend college (FFUQ 77a)
40. Hours worked 1973-74 (SFUQ 77, 79)

Appendix B (cont.)

	1	2	3	4	5	6	7	8	9	10
1	1.000									
2	0.569	1.000								
3	-0.320	-0.343	1.000							
4	-0.325	-0.357	0.390	1.000						
5	0.304	0.401	-0.370	-0.620	1.000					
6	0.243	0.390	-0.355	-0.361	0.357	1.000				
7	0.339	0.394	-0.383	-0.381	0.423	0.689	1.000			
8	0.202	0.242	-0.240	-0.316	0.341	0.315	0.385	1.000		
9	0.287	0.382	-0.323	-0.350	0.400	0.490	0.566	0.438	1.000	
10	0.161	0.204	-0.209	-0.282	0.286	0.283	0.357	0.380	0.487	1.000
11	0.400	0.473	-0.394	-0.411	0.465	0.564	0.665	0.422	0.663	0.357
12	0.400	0.389	-0.319	-0.268	0.236	0.259	0.266	0.148	0.204	0.116
13	0.411	0.400	-0.327	-0.272	0.233	0.266	0.270	0.143	0.199	0.111
14	0.404	0.416	-0.416	-0.283	0.294	0.309	0.311	0.172	0.230	0.138
15	0.349	0.386	-0.354	-0.236	0.237	0.277	0.282	0.146	0.196	0.125
16	0.223	0.244	-0.197	-0.138	0.131	0.274	0.229	0.106	0.179	0.109
17	0.184	0.198	-0.139	-0.100	0.089	0.219	0.160	0.083	0.142	0.088
18	0.265	0.297	-0.185	-0.162	0.144	0.271	0.243	0.117	0.200	0.128
19	0.209	0.214	-0.153	-0.109	0.077	0.251	0.224	0.114	0.199	0.148
20	0.199	0.221	-0.179	-0.124	0.123	0.247	0.218	0.087	0.159	0.091
21	0.093	0.098	-0.076	-0.055	0.055	0.114	0.091	0.043	0.071	0.050
22	0.240	0.263	-0.176	-0.154	0.138	0.246	0.221	0.101	0.175	0.102
23	-0.101	-0.138	0.059	0.134	-0.058	-0.275	-0.263	-0.176	-0.282	-0.227
24	-0.079	-0.126	0.017	0.107	-0.074	-0.244	-0.243	-0.152	-0.247	-0.195
25	0.446	0.453	-0.352	-0.313	0.252	0.259	0.299	0.157	0.218	0.119
26	0.425	0.430	-0.336	-0.252	0.278	0.255	0.300	0.145	0.212	0.116
27	0.429	0.442	-0.358	-0.301	0.293	0.259	0.305	0.153	0.221	0.124
28	0.438	0.480	-0.331	-0.357	0.349	0.309	0.319	0.205	0.271	0.167
29	0.436	0.472	-0.318	-0.349	0.335	0.306	0.309	0.194	0.251	0.148
30	0.417	0.449	-0.298	-0.334	0.327	0.299	0.299	0.187	0.251	0.143
31	-0.085	-0.014	0.004	-0.089	0.177	0.023	0.016	0.104	0.087	0.084
32	-0.040	-0.096	0.050	-0.004	-0.092	-0.066	-0.063	-0.042	-0.090	-0.016
33	0.216	0.213	-0.222	0.256	0.252	0.143	0.198	0.138	0.178	0.111
34	0.354	0.367	-0.301	0.272	0.241	0.255	0.255	0.180	0.230	0.155
35	0.121	0.119	-0.184	-0.153	0.140	0.105	0.117	0.118	0.135	0.082
36	0.094	0.076	-0.058	-0.094	0.068	-0.025	-0.022	0.028	-0.003	0.009
37	-0.192	-0.207	0.195	0.157	-0.164	-0.123	-0.122	-0.066	-0.055	-0.062
38	-0.215	-0.216	0.170	0.174	-0.151	-0.126	-0.126	-0.072	-0.057	-0.059
39	-0.291	-0.302	0.213	0.177	-0.162	-0.152	-0.154	-0.059	-0.137	-0.060
40	-0.181	-0.201	0.115	0.131	-0.132	-0.111	-0.114	-0.060	-0.060	-0.047

	11	12	13	14	15	16	17	18	19	20
11	1.000									
12	0.268	1.000								
13	0.203	0.806	1.000							
14	0.360	0.467	0.481	1.000						
15	0.314	0.403	0.416	0.566	1.000					
16	0.249	0.276	0.248	0.300	0.252	1.000				
17	0.203	0.207	0.184	0.232	0.189	0.532	1.000			
18	0.251	0.308	0.266	0.256	0.212	0.677	0.441	1.000		
19	0.242	0.212	0.205	0.160	0.148	0.334	0.256	0.354	1.000	
20	0.230	0.227	0.240	0.265	0.224	0.523	0.332	0.406	0.266	1.000
21	0.093	0.110	0.112	0.130	0.105	0.223	0.410	0.191	0.150	0.378
22	0.226	0.262	0.274	0.232	0.194	0.406	0.285	0.259	0.223	0.649
23	-0.291	-0.062	0.004	-0.009	-0.017	-0.122	-0.121	-0.192	-0.293	-0.051
24	-0.258	0.014	0.020	0.013	-0.002	-0.110	-0.110	-0.159	-0.280	-0.066
25	0.327	0.504	0.523	0.488	0.410	0.267	0.191	0.357	0.213	0.239
26	0.320	0.506	0.524	0.468	0.410	0.244	0.177	0.330	0.186	0.221
27	0.334	0.469	0.485	0.470	0.396	0.265	0.195	0.329	0.204	0.239
28	0.372	0.442	0.454	0.465	0.373	0.245	0.190	0.319	0.216	0.225
29	0.355	0.433	0.446	0.448	0.366	0.246	0.185	0.318	0.216	0.229
30	0.349	0.418	0.429	0.427	0.358	0.248	0.190	0.311	0.202	0.223
31	-0.103	-0.083	-0.112	-0.083	-0.069	-0.017	-0.032	-0.030	-0.072	-0.026
32	-0.024	-0.061	-0.044	-0.077	-0.058	-0.064	-0.037	-0.045	0.023	-0.056
33	0.177	0.141	0.139	0.195	0.171	0.075	0.041	0.060	0.003	0.058
34	0.288	0.333	0.339	0.342	0.278	0.200	0.158	0.235	0.175	0.172
35	0.115	0.087	0.091	0.127	0.102	0.074	0.059	0.083	0.076	0.077
36	0.068	0.092	0.092	0.139	0.096	0.057	0.037	0.045	0.025	0.067
37	-0.123	-0.154	-0.132	-0.204	-0.162	-0.117	-0.076	-0.142	-0.047	-0.102
38	-0.138	-0.246	-0.250	-0.223	-0.194	-0.093	-0.067	-0.121	-0.073	-0.095
39	-0.213	-0.415	-0.418	-0.330	-0.274	-0.188	-0.143	-0.256	-0.159	-0.179
40	-0.111	-0.192	-0.186	-0.193	-0.161	-0.135	-0.097	-0.147	-0.072	-0.124

	21	22	23	24	25	26	27	28	29	30
21	1.000									
22	0.299	1.000								
23	-0.043	-0.163	1.000							
24	-0.045	-0.163	0.823	1.000						
25	0.109	0.338	-0.007	0.012	1.000					
26	0.100	0.332	0.005	0.027	0.860	1.000				
27	0.101	0.309	-0.007	0.016	0.730	0.697	1.000			
28	0.108	0.302	-0.004	-0.073	0.603	0.559	0.565	1.000		
29	0.106	0.302	-0.007	-0.056	0.661	0.609	0.621	0.738	1.000	
30	0.103	0.287	-0.009	-0.049	0.617	0.575	0.654	0.652	0.700	1.000
31	0.002	-0.028	0.025	0.038	-0.119	-0.117	-0.100	-0.014	-0.030	-0.033
32	-0.030	-0.048	-0.091	-0.106	-0.080	-0.072	-0.082	-0.110	-0.114	-0.111
33	0.027	0.055	0.019	0.036	0.175	0.164	0.175	0.192	0.187	0.186
34	0.079	0.212	-0.070	-0.048	0.367	0.348	0.351	0.375	0.357	0.329
35	0.042	0.075	-0.065	-0.048	0.116	0.099	0.105	0.145	0.138	0.123
36	0.021	0.045	0.073	0.085	0.057	0.081	0.094	0.125	0.105	0.105
37	-0.054	-0.132	-0.032	-0.045	-0.300	-0.277	-0.277	-0.214	-0.311	-0.271
38	-0.048	-0.128	-0.022	-0.042	-0.351	-0.349	-0.310	-0.271	-0.288	-0.266
39	-0.064	-0.245	-0.010	-0.031	-0.476	-0.468	-0.419	-0.393	-0.387	-0.363
40	-0.056	-0.136	-0.011	-0.022	-0.279	-0.259	-0.326	-0.262	-0.221	-0.365

	31	32	33	34	35	36	37	38	39	40
31	1.000									
32	-0.190	1.000								
33	0.174	-0.092	1.000							
34	0.024	-0.091	0.171	1.000						
35	0.097	-0.055	0.182	0.126	1.000					
36	0.034	-0.069	0.142	0.051	0.347	1.000				
37	-0.135	0.171	-0.101	-0.175	-0.063	-0.054	1.000			
38	-0.109	0.064	-0.058	-0.247	-0.070	-0.083	0.141	1.000		
39	0.075	0.064	-0.092	-0.284	-0.099	-0.100	0.163	0.369	1.000	
40	-0.099	0.146	-0.100	-0.149	-0.055	-0.058	0.247	0.123	0.165	1.000

Appendix C. Variables in Correlation Matrix

1. Academic program
2. Class standing
3. Verbal aptitude
4. Performance aptitude
5. Parental aspirations
6. Educational aspirations in high school (1972)
7. Father's socioeconomic status
8. Mother's socioeconomic status
9. Race
10. Educational aspirations 1973
11. Educational aspirations 1974
12. Educational status 1972
13. Educational status 1973
14. Educational status 1974
15. Sex
16. Hours worked in high school
17. Hours homework in high school
18. Educational plans of class friends
19. Discussion of educational plans with parents
20. Influence on educational plans by parents
21. Hours worked 1972-73
22. Friends' encouragement to attend college since high school
23. Parental encouragement to attend college since high school
24. Hours worked 1974-74

Appendix C (cont.)

	1	2	3	4	5	6	7	8	9	10
1	1.000									
2	-0.586	1.000								
3	0.609	-0.607	1.000							
4	0.538	-0.613	0.768	1.000						
5	0.585	-0.352	0.370	0.286	1.000					
6	0.669	-0.443	0.485	0.372	0.650	1.000				
7	0.424	-0.217	0.383	0.283	0.383	0.420	1.000			
8	0.381	-0.209	0.345	0.248	0.349	0.374	0.720	1.000		
9	-0.170	0.144	-0.351	-0.358	0.006	-0.008	-0.211	-0.173	1.000	
10	0.622	-0.401	0.400	0.295	0.612	0.633	0.396	0.374	0.004	1.000
11	0.605	-0.396	0.399	0.294	0.562	0.607	0.384	0.359	0.0	0.805
12	0.706	-0.515	0.454	0.404	0.575	0.696	0.403	0.382	-0.112	0.730
13	0.650	-0.467	0.414	0.348	0.530	0.583	0.375	0.358	-0.084	0.744
14	0.620	-0.448	0.401	0.345	0.510	0.558	0.372	0.343	-0.075	0.697
15	-0.037	-0.228	-0.017	0.067	-0.110	-0.105	-0.036	-0.033	0.036	-0.126
16	-0.118	0.121	-0.068	-0.046	-0.057	-0.087	-0.063	-0.064	-0.106	-0.083
17	0.283	-0.325	0.195	0.216	0.155	0.246	0.078	0.069	0.027	0.183
18	0.476	-0.325	0.317	0.291	0.373	0.419	0.271	0.239	-0.069	0.388
19	0.158	-0.191	0.134	0.162	0.059	0.164	0.099	0.095	-0.066	0.118
20	0.110	-0.098	-0.023	0.012	0.102	0.163	0.064	0.068	0.087	0.050
21	-0.264	0.203	-0.147	-0.124	-0.215	-0.243	-0.154	-0.147	-0.040	-0.313
22	-0.285	0.205	-0.157	-0.123	-0.276	-0.276	-0.137	-0.140	-0.031	-0.375
23	-0.391	0.216	-0.243	-0.176	-0.470	-0.406	-0.274	-0.265	-0.017	-0.506
24	-0.253	0.164	-0.136	-0.099	-0.210	-0.231	-0.171	-0.161	-0.016	-0.291

	11	12	13	14	15	16	17	18	19	20
11	1.000									
12	0.691	1.000								
13	0.707	0.926	1.000							
14	0.744	0.743	0.818	1.000						
15	-0.106	-0.016	-0.032	-0.036	1.000					
16	-0.086	-0.127	-0.123	-0.120	-0.190	1.000				
17	0.194	0.224	0.203	0.201	0.174	-0.092	1.000			
18	0.359	0.436	0.396	0.356	0.034	-0.091	0.171	1.000		
19	0.114	0.168	0.150	0.133	0.057	-0.055	0.182	0.126	1.000	
20	0.099	0.105	0.118	0.118	0.034	-0.069	0.142	0.091	0.347	1.000
21	-0.291	-0.365	-0.336	-0.294	-0.135	0.171	-0.101	-0.179	-0.063	-0.054
22	-0.326	-0.314	-0.312	-0.290	-0.009	0.064	-0.058	-0.247	-0.070	-0.083
23	-0.441	-0.456	-0.419	-0.393	0.075	0.064	-0.092	-0.254	-0.099	-0.100
24	-0.343	-0.305	-0.347	-0.398	-0.099	0.146	-0.100	-0.145	-0.055	-0.058

	21	22	23	24
21	1.000			
22	0.141	1.000		
23	0.183	0.369	1.000	
24	0.247	0.123	0.169	1.000

Appendix D. Path Coefficients (Standardized)

Independent Variables	Dependent Variables																				
	1	2	3	4	5	6	7	8	10	11	12	13	14	16	17	18	19	20	21	22	23	24
1						.26			.07	.03	.36	.01	.09						-.15	-.12	-.13	-.07
2						-.06			-.03	.00	-.16	-.01	-.06						.03	.07	-.01	-.04
3						.16			.04	.05	.09	.03	-.04						.02	.02	-.02	.01
4						-.05			-.05	-.04	.00	-.05	.04						.02	.05	.03	.02
5						.33			.13	.01	.14	.00	.02						-.05	-.11	-.30	-.01
6									.12	.05	.22	-.04	.48						-.09	-.07	-.08	-.04
7	.30	-.12	.23	.16	.29	.09			.04	.01	.03	.01	.03	-.06	.07	.20	.06	.05	-.02	.03	-.03	-.03
8	.15	-.11	.13	.08	.15	.02			.03	.01	.06	.01	.00	-.05	.03	.09	.05	.05	-.03	-.03	-.06	-.02
9	-.08	.11	-.28	-.31	.10	.11	-.21	-.17	.06	.04	-.04	.02	-.02	-.12	.04	-.01	-.05	.11	-.05	-.04	-.05	-.01
10										.49			.14									-.05
12									-.04	.09		.93	.00									.26
13									.46	-.09			.75									-.44
14										.33												
15	-.02	-.24	.01	.09	-.10	-.0[illegible]			-.08	-.03	-.01	-.02	-.01	-.19	.18	.04	.10	.03	-.13	-.01	.03	-.11
16						.0[illegible]			.02	.01	-.04	-.01	-.01						.11	.01	.02	.07
17						.06			.01	.00	-.01	.00	.00						.02	.00	.02	-.01
18						.08			.02	.01	.07	-.02	.00						-.02	-.12	-.03	.01
19						.03			.00	.00	.02	.01	-.01						.00	.00	-.03	.01
20						.06			-.02	-.01	.02	-.02	.02						.01	-.02	-.02	-.01
21									-.06	.00		.00	.00									.13
22									-.08	-.01		-.03	.00									-.01
23									-.12	.00		.01	-.02									.01
24										-.05			-.11									
Multiple Correlation	.45	.35	.42	.43	.42	.77	.21	.17	.82	.85	.77	.93	.85	.24	.20	.28	.15	.13	.35	.35	.51	.41

Note: See Appendix C for variables corresponding to numbers in this table.

PERSISTENCE STUDY

SAMPLE: MALES

STATUS EXAMINED: ATTENDANCE AT 2 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	5447	1001489.	74.4%
2	NO	NO	NO	YES	87	15252.	1.1%
3	NO	NO	YES	NO	93	18409.	1.4%
4	NO	NO	YES	YES	65	13234.	1.0%
5	NO	YES	NO	NO	175	32036.	2.4%
6	NO	YES	NO	YES	12	2374.	0.2%
7	NO	YES	YES	NO	140	26869.	2.0%
8	NO	YES	YES	YES	52	9523.	0.7%
9	YES	NO	NO	NO	457	84260.	6.3%
10	YES	NO	NO	YES	19	2613.	0.2%
11	YES	NO	YES	NO	38	6991.	0.5%
12	YES	NO	YES	YES	24	4485.	0.3%
13	YES	YES	NO	NO	222	43781.	3.3%
14	YES	YES	NO	YES	34	6871.	0.5%
15	YES	YES	YES	NO	286	58171.	4.3%
16	YES	YES	YES	YES	97	19741.	1.5%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				1027	170070.	(11.2% OF TOTAL SAMPLE)
ATTENDING	N	250467.	206134.	162168.	75656.		
	%	16.5%	13.6%	10.7%	5.0%		
NOT ATTENDING	N	1265702.	1215898.	1259263.	1320585.		
	%	83.5%	80.2%	83.1%	87.1%		
STATUS UNKNOWN	N	0.	94137.	94738.	119929.		
	%	0.0%	6.2%	6.2%	7.9%		
TOTAL		1516170.	1516170.	1516170.	1516170.		

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: FEMALES

STATUS EXAMINED: ATTENDANCE AT 2 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	5979	1079660.	77.3%
2	NO	NO	NO	YES	85	13702.	1.0%
3	NO	NO	YES	NO	65	11432.	0.8%
4	NO	NO	YES	YES	37	8121.	0.6%
5	NO	YES	NO	NO	145	26239.	1.9%
6	NO	YES	NO	YES	7	1479.	0.1%
7	NO	YES	YES	NO	116	20550.	1.5%
8	NO	YES	YES	YES	33	6397.	0.5%
9	YES	NO	NO	NO	492	91826.	6.6%
10	YES	NO	NO	YES	25	5364.	0.4%
11	YES	NO	YES	NO	38	6392.	0.5%
12	YES	NO	YES	YES	23	5295.	0.4%
13	YES	YES	NO	NO	214	40974.	2.9%
14	YES	YES	NO	YES	15	2024.	0.1%
15	YES	YES	YES	NO	315	64390.	4.6%
16	YES	YES	YES	YES	71	12472.	0.9%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				735	128940.	(8.5% OF TOTAL SAMPLE)

ATTENDING	N	253351.	181302.	139305.	57430.
	%	16.6%	11.9%	9.1%	3.8%
NOT ATTENDING	N	1271906.	1272862.	1314661.	1366449.
	%	83.4%	83.5%	86.2%	89.6%
STATUS UNKNOWN	N	0.	71093.	71290.	101379.
	%	0.0%	4.7%	4.7%	6.6%
TOTAL		1525257.	1525257.	1525257.	1525257.

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: BLACKS

STATUS EXAMINED: ATTENDANCE AT 2 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	1440	177083.	80.8%
2	NO	NO	NO	YES	28	3745.	1.7%
3	NO	NO	YES	NO	24	2809.	1.3%
4	NO	NO	YES	YES	7	825.	0.4%
5	NO	YES	NO	NO	49	5219.	2.4%
6	NO	YES	NO	YES	4	499.	0.2%
7	NO	YES	YES	NO	37	4234.	1.9%
8	NO	YES	YES	YES	16	1817.	0.8%
9	YES	NO	NO	NO	110	13390.	6.1%
10	YES	NO	NO	YES	4	609.	0.3%
11	YES	NO	YES	NO	6	604.	0.3%
12	YES	NO	YES	YES	3	243.	0.1%
13	YES	YES	NO	NO	23	3006.	1.4%
14	YES	YES	NO	YES	5	529.	0.2%
15	YES	YES	YES	NO	27	3354.	1.5%
16	YES	YES	YES	YES	10	1161.	0.5%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				290	32636.	(13.0% OF TOTAL SAMPLE)

ATTENDING	N	25749.	20897.	15718.	9741.
	%	10.2%	8.3%	6.2%	3.9%
NOT ATTENDING	N	226013.	214650.	219446.	217558.
	%	89.8%	85.3%	87.2%	86.4%
STATUS UNKNOWN	N	0.	16216.	16598.	24464.
	%	0.0%	6.4%	6.6%	9.7%
TOTAL		251762.	251762.	251762.	251762.

PERSISTENCE STUDY

SAMPLE: WHITES

STATUS EXAMINED: ATTENDANCE AT 2 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	8774	1716436.	75.7%
2	NO	NO	NO	YES	115	20925.	0.9%
3	NO	NO	YES	NO	116	24128.	1.1%
4	NO	NO	YES	YES	77	16925.	0.7%
5	NO	YES	NO	NO	231	47037.	2.1%
6	NO	YES	NO	YES	11	2572.	0.1%
7	NO	YES	YES	NO	185	38460.	1.7%
8	NO	YES	YES	YES	49	11336.	0.5%
9	YES	NO	NO	NO	741	147691.	6.5%
10	YES	NO	NO	YES	31	6048.	0.3%
11	YES	NO	YES	NO	55	10449.	0.5%
12	YES	NO	YES	YES	41	9118.	0.4%
13	YES	YES	NO	NO	362	74585.	3.3%
14	YES	YES	NO	YES	36	7182.	0.3%
15	YES	YES	YES	NO	509	108995.	4.8%
16	YES	YES	YES	YES	121	25770.	1.1%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				1202	224535.	(9.0% OF TOTAL SAMPLE)
ATTENDING	N	430193.	326764.	252659.	103276.		
	%	17.3%	13.1%	10.1%	4.1%		
NOT ATTENDING	N	2061998.	2041157.	2114858.	2226213.		
	%	82.7%	81.9%	84.9%	89.3%		
STATUS UNKNOWN	N	0.	124271.	124675.	162702.		
	%	0.0%	5.0%	5.0%	6.5%		
TOTAL		2492192.	2492192.	2492192.	2492192.		

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: BLACK MALES

STATUS EXAMINED: ATTENDANCE AT 2 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	577	71054.	80.3%
2	NO	NO	NO	YES	14	1690.	1.9%
3	NO	NO	YES	NO	6	678.	0.8%
4	NO	NO	YES	YES	2	305.	0.3%
5	NO	YES	NO	NO	25	2760.	3.1%
6	NO	YES	NO	YES	1	96.	0.1%
7	NO	YES	YES	NO	13	1595.	1.8%
8	NO	YES	YES	YES	8	844.	1.0%
9	YES	NO	NO	NO	49	5331.	6.0%
10	YES	NO	NO	YES	1	89.	0.1%
11	YES	NO	YES	NO	3	236.	0.3%
12	YES	NO	YES	YES	1	48.	0.1%
13	YES	YES	NO	NO	13	1758.	2.0%
14	YES	YES	NO	YES	2	273.	0.3%
15	YES	YES	YES	NO	12	1535.	1.7%
16	YES	YES	YES	YES	2	186.	0.2%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				178	19264.	(17.9% OF TOTAL SAMPLE)
ATTENDING	N	10964.	9417.	5671.	3622.		
	%	10.2%	8.7%	5.3%	3.4%		
NOT ATTENDING	N	96776.	88486.	92241.	90262.		
	%	89.8%	82.1%	85.6%	83.8%		
STATUS UNKNOWN	N	0.	9838.	9828.	13856.		
	%	0.0%	9.1%	9.1%	12.9%		
TOTAL		107740.	107740.	107740.	107740.		

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: BLACK FEMALES

STATUS EXAMINED: ATTENDANCE AT 2 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	FALL 73	FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	862	105948.	81.1%
2	NO	NO	NO	YES	14	2055.	1.6%
3	NO	NO	YES	NO	18	2131.	1.6%
4	NO	NO	YES	YES	5	521.	0.4%
5	NO	YES	NO	NO	24	2460.	1.9%
6	NO	YES	NO	YES	3	404.	0.3%
7	NO	YES	YES	NO	24	2639.	2.0%
8	NO	YES	YES	YES	8	973.	0.7%
9	YES	NO	NO	NO	61	8059.	6.2%
10	YES	NO	NO	YES	3	520.	0.4%
11	YES	NO	YES	NO	3	367.	0.3%
12	YES	NO	YES	YES	2	195.	0.1%
13	YES	YES	NO	NO	10	1248.	1.0%
14	YES	YES	NO	YES	3	256.	0.2%
15	YES	YES	YES	NO	15	1819.	1.4%
16	YES	YES	YES	YES	8	975.	0.7%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				110	13101.	(9.1% OF TOTAL SAMPLE)
ATTENDING	N	14785.	11481.	10047.	6119.		
	%	10.3%	8.0%	7.0%	4.3%		
NOT ATTENDING	N	128886.	126084.	127125.	127154.		
	%	89.7%	87.8%	88.5%	88.5%		
STATUS UNKNOWN	N	0.	6106.	6499.	10398.		
	%	0.0%	4.3%	4.5%	7.2%		
TOTAL		143671.	143671.	143671.	143671.		

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: WHITE MALES

STATUS EXAMINED: ATTENDANCE AT 2 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	4264	837347.	74.2%
2	NO	NO	NO	YES	62	12161.	1.1%
3	NO	NO	YES	NO	78	16567.	1.5%
4	NO	NO	YES	YES	55	11839.	1.0%
5	NO	YES	NO	NO	128	26092.	2.3%
6	NO	YES	NO	YES	9	2021.	0.2%
7	NO	YES	YES	NO	106	22210.	2.0%
8	NO	YES	YES	YES	31	6832.	0.6%
9	YES	NO	NO	NO	357	70934.	6.3%
10	YES	NO	NO	YES	15	2262.	0.2%
11	YES	NO	YES	NO	27	5373.	0.5%
12	YES	NO	YES	YES	22	4268.	0.4%
13	YES	YES	NO	NO	176	37368.	3.3%
14	YES	YES	NO	YES	25	5477.	0.5%
15	YES	YES	YES	NO	240	51258.	4.5%
16	YES	YES	YES	YES	70	15792.	1.4%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				693	127427.	(10.2% OF TOTAL SAMPLE)
ATTENDING	N	212010.	172695.	138418.	61897.		
	%	16.9%	13.8%	11.0%	4.9%		
NOT ATTENDING	N	1043220.	1012381.	1045942.	1104986.		
	%	83.1%	80.7%	83.3%	88.0%		
STATUS UNKNOWN	N	0.	70155.	70870.	88347.		
	%	0.0%	5.6%	5.6%	7.0%		
TOTAL		1255230.	1255230.	1255230.	1255230.		

PERSISTENCE STUDY

SAMPLE: WHITE FEMALES

STATUS EXAMINED: ATTENDANCE AT 2 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	4510	879088.	77.1%
2	NO	NO	NO	YES	53	8765.	0.8%
3	NO	NO	YES	NO	38	7560.	0.7%
4	NO	NO	YES	YES	22	5086.	0.4%
5	NO	YES	NO	NO	103	20945.	1.8%
6	NO	YES	NO	YES	2	551.	0.0%
7	NO	YES	YES	NO	79	16250.	1.4%
8	NO	YES	YES	YES	18	4504.	0.4%
9	YES	NO	NO	NO	384	76756.	6.7%
10	YES	NO	NO	YES	16	3786.	0.3%
11	YES	NO	YES	NO	28	5076.	0.4%
12	YES	NO	YES	YES	19	4850.	0.4%
13	YES	YES	NO	NO	186	37217.	3.3%
14	YES	YES	NO	YES	11	1706.	0.1%
15	YES	YES	YES	NO	269	57737.	5.1%
16	YES	YES	YES	YES	51	9977.	0.9%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				503	95975.	(7.8% OF TOTAL SAMPLE)

ATTENDING	N	218183.	154069.	114241.	41379.
	%	17.7%	12.5%	9.2%	3.3%
NOT ATTENDING	N	1017646.	1028439.	1068578.	1120650.
	%	82.3%	83.2%	86.5%	90.7%
STATUS UNKNOWN	N	0.	53321.	53010.	73800.
	%	0.0%	4.3%	4.3%	6.0%
TOTAL		1235829.	1235829.	1235829.	1235829.

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: TOTAL

STATUS EXAMINED: ATTENDANCE AT 2 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	11427	2081229.	75.9%
2	NO	NO	NO	YES	172	28954.	1.1%
3	NO	NO	YES	NO	158	29841.	1.1%
4	NO	NO	YES	YES	102	21355.	0.8%
5	NO	YES	NO	NO	320	58275.	2.1%
6	NO	YES	NO	YES	19	3853.	0.1%
7	NO	YES	YES	NO	256	47419.	1.7%
8	NO	YES	YES	YES	85	15920.	0.6%
9	YES	NO	NO	NO	949	176086.	6.4%
10	YES	NO	NO	YES	44	7977.	0.3%
11	YES	NO	YES	NO	76	13383.	0.5%
12	YES	NO	YES	YES	47	9780.	0.4%
13	YES	YES	NO	NO	436	84755.	3.1%
14	YES	YES	NO	YES	49	8896.	0.3%
15	YES	YES	YES	NO	601	122561.	4.5%
16	YES	YES	YES	YES	168	32213.	1.2%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				1774	301101.	(9.9% OF TOTAL SAMPLE)

ATTENDING	N	503983.	387437.	301474.	133085.
	%	16.6%	12.7%	9.9%	4.4%
NOT ATTENDING	N	2539615.	2489179.	2574343.	2687844.
	%	83.4%	81.8%	84.6%	88.3%
STATUS UNKNOWN	N	0.	166983.	167782.	222669.
	%	0.0%	5.5%	5.5%	7.3%
TOTAL		3043598.	3043598.	3043598.	3043598.

PERSISTENCE STUDY

SAMPLE: MALES

STATUS EXAMINED: ATTENDANCE AT 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	4121	745217.	55.4%
2	NO	NO	NO	YES	222	42731.	3.2%
3	NO	NO	YES	NO	31	5729.	0.4%
4	NO	NO	YES	YES	77	15830.	1.2%
5	NO	YES	NO	NO	73	14201.	1.1%
6	NO	YES	NO	YES	8	1757.	0.1%
7	NO	YES	YES	NO	50	7915.	0.6%
8	NO	YES	YES	YES	118	22272.	1.7%
9	YES	NO	NO	NO	375	67770.	5.0%
10	YES	NO	NO	YES	90	18535.	1.4%
11	YES	NO	YES	NO	28	5774.	0.4%
12	YES	NO	YES	YES	92	18898.	1.4%
13	YES	YES	NO	NO	275	53960.	4.0%
14	YES	YES	NO	YES	118	23017.	1.7%
15	YES	YES	YES	NO	241	42569.	3.2%
16	YES	YES	YES	YES	1329	259925.	19.3%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				1027	170070.	(11.2% OF TOTAL SAMPLE)

ATTENDING	N	529958.	437057.	387706.	410051.
	%	35.0%	28.8%	25.6%	27.0%
NOT ATTENDING	N	986212.	984976.	1033726.	986190.
	%	65.0%	65.0%	68.2%	65.0%
STATUS UNKNOWN	N	0.	94137.	94738.	119929.
	%	0.0%	6.2%	6.2%	7.9%
TOTAL		1516170.	1516170.	1516170.	1516170.

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: FEMALES

STATUS EXAMINED: ATTENDANCE AT 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	4633	829609.	59.4%
2	NO	NO	NO	YES	200	38465.	2.8%
3	NO	NO	YES	NO	42	6728.	0.5%
4	NO	NO	YES	YES	54	9843.	0.7%
5	NO	YES	NO	NO	73	14203.	1.0%
6	NO	YES	NO	YES	13	2802.	0.2%
7	NO	YES	YES	NO	32	5024.	0.4%
8	NO	YES	YES	YES	72	12149.	0.9%
9	YES	NO	NO	NO	386	68397.	4.9%
10	YES	NO	NO	YES	61	11228.	0.8%
11	YES	NO	YES	NO	32	6279.	0.4%
12	YES	NO	YES	YES	69	13171.	0.9%
13	YES	YES	NO	NO	263	52397.	3.8%
14	YES	YES	NO	YES	110	21446.	1.5%
15	YES	YES	YES	NO	241	43323.	3.1%
16	YES	YES	YES	YES	1379	261255.	18.7%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				735	128940.	(8.5% OF TOTAL SAMPLE)

ATTENDING	N	500913.	420290.	363968.	374153.
	%	32.8%	27.6%	23.9%	24.5%
NOT ATTENDING	N	1024345.	1033874.	1089999.	1049725.
	%	67.2%	67.8%	71.5%	68.8%
STATUS UNKNOWN	N	0.	71093.	71290.	101379.
	%	0.0%	4.7%	4.7%	6.6%
TOTAL		1525257.	1525257.	1525257.	1525257.

PERSISTENCE STUDY

SAMPLE: BLACKS

STATUS EXAMINED: ATTENDANCE AT 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	1067	128740.	58.8%
2	NO	NO	NO	YES	41	4598.	2.1%
3	NO	NO	YES	NO	15	2085.	1.0%
4	NO	NO	YES	YES	8	943.	0.4%
5	NO	YES	NO	NO	19	2404.	1.1%
6	NO	YES	NO	YES	4	429.	0.2%
7	NO	YES	YES	NO	16	1932.	0.9%
8	NO	YES	YES	YES	30	3969.	1.8%
9	YES	NO	NO	NO	166	19003.	8.7%
10	YES	NO	NO	YES	17	2036.	0.9%
11	YES	NO	YES	NO	9	1155.	0.5%
12	YES	NO	YES	YES	18	2253.	1.0%
13	YES	YES	NO	NO	51	7193.	3.3%
14	YES	YES	NO	YES	31	4277.	2.0%
15	YES	YES	YES	NO	52	6304.	2.9%
16	YES	YES	YES	YES	249	31806.	14.5%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				290	32636.	(13.0% OF TOTAL SAMPLE)
ATTENDING	N	82384.	59946.	51801.	51316.		
	%	32.7%	23.8%	20.6%	20.4%		
NOT ATTENDING	N	169378.	175601.	183363.	175982.		
	%	67.3%	69.7%	72.8%	69.9%		
STATUS UNKNOWN	N	0.	16216.	16598.	24464.		
	%	0.0%	6.4%	6.6%	9.7%		
TOTAL		251762.	251762.	251762.	251762.		

PERSISTENCE STUDY

SAMPLE: WHITES

STATUS EXAMINED: ATTENDANCE AT 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	6575	1272423.	56.1%
2	NO	NO	NO	YES	336	70182.	3.1%
3	NO	NO	YES	NO	48	8575.	0.4%
4	NO	NO	YES	YES	106	22704.	1.0%
5	NO	YES	NO	NO	111	23803.	1.0%
6	NO	YES	NO	YES	15	3523.	0.2%
7	NO	YES	YES	NO	58	10084.	0.4%
8	NO	YES	YES	YES	142	28030.	1.2%
9	YES	NO	NO	NO	501	103909.	4.6%
10	YES	NO	NO	YES	118	25494.	1.1%
11	YES	NO	YES	NO	45	9976.	0.4%
12	YES	NO	YES	YES	129	27662.	1.2%
13	YES	YES	NO	NO	452	94517.	4.2%
14	YES	YES	NO	YES	183	37719.	1.7%
15	YES	YES	YES	NO	383	72431.	3.2%
16	YES	YES	YES	YES	2252	456624.	20.1%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				1202	224535.	(9.0% OF TOTAL SAMPLE)
ATTENDING	N	876243.	741488.	648068.	681837.		
	%	35.2%	29.8%	26.0%	27.4%		
NOT ATTENDING	N	1615948.	1626433.	1719448.	1647652.		
	%	64.8%	65.3%	69.0%	66.1%		
STATUS UNKNOWN	N	0.	124271.	124675.	162702.		
	%	0.0%	5.0%	5.0%	6.5%		
TOTAL		2492192.	2492192.	2492192.	2492192.		

PERSISTENCE STUDY

SAMPLE: BLACK MALES

STATUS EXAMINED: ATTENDANCE AT 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	439	52514.	59.4%
2	NO	NO	NO	YES	16	1632.	1.8%
3	NO	NO	YES	NO	4	350.	0.4%
4	NO	NO	YES	YES	6	720.	0.8%
5	NO	YES	NO	NO	7	707.	0.8%
6	NO	YES	NO	YES	1	104.	0.1%
7	NO	YES	YES	NO	9	805.	0.9%
8	NO	YES	YES	YES	15	2078.	2.3%
9	YES	NO	NO	NO	70	7737.	8.7%
10	YES	NO	NO	YES	6	742.	0.8%
11	YES	NO	YES	NO	2	254.	0.3%
12	YES	NO	YES	YES	9	1333.	1.5%
13	YES	YES	NO	NO	24	3142.	3.6%
14	YES	YES	NO	YES	15	2520.	2.8%
15	YES	YES	YES	NO	20	2742.	3.1%
16	YES	YES	YES	YES	86	11095.	12.5%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				178	19264.	(17.9% OF TOTAL SAMPLE)

ATTENDING	N	34505.	24348.	20146.	20739.
	%	32.0%	22.6%	18.7%	19.2%
NOT ATTENDING	N	73235.	73555.	77766.	73145.
	%	68.0%	68.3%	72.2%	67.9%
STATUS UNKNOWN	N	0.	9838.	9828.	13856.
	%	0.0%	9.1%	9.1%	12.9%
TOTAL		107740.	107740.	107740.	107740.

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: BLACK FEMALES

STATUS EXAMINED: ATTENDANCE AT 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	628	76226.	58.4%
2	NO	NO	NO	YES	25	2965.	2.3%
3	NO	NO	YES	NO	11	1734.	1.3%
4	NO	NO	YES	YES	2	223.	0.2%
5	NO	YES	NO	NO	12	1698.	1.3%
6	NO	YES	NO	YES	3	325.	0.2%
7	NO	YES	YES	NO	7	1126.	0.9%
8	NO	YES	YES	YES	15	1891.	1.4%
9	YES	NO	NO	NO	96	11266.	8.6%
10	YES	NO	NO	YES	11	1294.	1.0%
11	YES	NO	YES	NO	7	900.	0.7%
12	YES	NO	YES	YES	9	920.	0.7%
13	YES	YES	NO	NO	27	4052.	3.1%
14	YES	YES	NO	YES	16	1758.	1.3%
15	YES	YES	YES	NO	32	3562.	2.7%
16	YES	YES	YES	YES	162	20630.	15.8%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				110	13101.	(9.1% OF TOTAL SAMPLE)

ATTENDING	N	47737.	35518.	31575.	30497.
	%	33.2%	24.7%	22.0%	21.2%
NOT ATTENDING	N	95934.	102047.	105597.	102775.
	%	66.8%	71.0%	73.5%	71.5%
STATUS UNKNOWN	N	0.	6106.	6499.	10398.
	%	0.0%	4.3%	4.5%	7.2%
TOTAL		143671.	143671.	143671.	143671.

PERSISTENCE STUDY

SAMPLE: WHITE MALES

STATUS EXAMINED: ATTENDANCE AT 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	3112	605093.	53.7%
2	NO	NO	NO	YES	183	37878.	3.4%
3	NO	NO	YES	NO	22	4653.	0.4%
4	NO	NO	YES	YES	61	13874.	1.2%
5	NO	YES	NO	NO	59	12542.	1.1%
6	NO	YES	NO	YES	7	1653.	0.1%
7	NO	YES	YES	NO	36	6579.	0.6%
8	NO	YES	YES	YES	90	18341.	1.6%
9	YES	NO	NO	NO	257	53258.	4.7%
10	YES	NO	NO	YES	74	16329.	1.4%
11	YES	NO	YES	NO	21	4698.	0.4%
12	YES	NO	YES	YES	74	16278.	1.4%
13	YES	YES	NO	NO	229	47903.	4.2%
14	YES	YES	NO	YES	94	18811.	1.7%
15	YES	YES	YES	NO	203	37645.	3.3%
16	YES	YES	YES	YES	1143	232268.	20.6%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				693	127427.	(10.2% OF TOTAL SAMPLE)
ATTENDING	N	457916.	384508.	341500.	361722.		
	%	36.5%	30.6%	27.2%	28.8%		
NOT ATTENDING	N	797314.	800567.	842860.	805161.		
	%	63.5%	63.8%	67.1%	64.1%		
STATUS UNKNOWN	N	0.	70155.	70870.	88347.		
	%	0.0%	5.6%	5.6%	7.0%		
TOTAL		1255230.	1255230.	1255230.	1255230.		

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: WHITE FEMALES

STATUS EXAMINED: ATTENDANCE AT 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	3463	667331.	58.5%
2	NO	NO	NO	YES	153	32304.	2.8%
3	NO	NO	YES	NO	26	3922.	0.3%
4	NO	NO	YES	YES	45	8830.	0.8%
5	NO	YES	NO	NO	52	11261.	1.0%
6	NO	YES	NO	YES	8	1870.	0.2%
7	NO	YES	YES	NO	22	3506.	0.3%
8	NO	YES	YES	YES	52	9689.	0.9%
9	YES	NO	NO	NO	244	50651.	4.4%
10	YES	NO	NO	YES	44	9165.	0.8%
11	YES	NO	YES	NO	24	5278.	0.5%
12	YES	NO	YES	YES	55	11384.	1.0%
13	YES	YES	NO	NO	223	46615.	4.1%
14	YES	YES	NO	YES	89	18907.	1.7%
15	YES	YES	YES	NO	180	34786.	3.1%
16	YES	YES	YES	YES	1109	224356.	19.7%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				503	95975.	(7.8% OF TOTAL SAMPLE)
ATTENDING	N	417587.	356979.	306568.	319593.		
	%	33.8%	28.9%	24.8%	25.9%		
NOT ATTENDING	N	818242.	825528.	876251.	842436.		
	%	66.2%	66.8%	70.9%	68.2%		
STATUS UNKNOWN	N	0.	53321.	53010.	73800.		
	%	0.0%	4.3%	4.3%	6.0%		
TOTAL		1235829.	1235829.	1235829.	1235829.		

PERSISTENCE STUDY

SAMPLE: TOTAL

STATUS EXAMINED: ATTENDANCE AT 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	FALL 73	FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	8754	1574826.	57.4%
2	NO	NO	NO	YES	422	81196.	3.0%
3	NO	NO	YES	NO	73	12457.	0.5%
4	NO	NO	YES	YES	131	25673.	0.9%
5	NO	YES	NO	NO	146	28403.	1.0%
6	NO	YES	NO	YES	21	4560.	0.2%
7	NO	YES	YES	NO	82	12939.	0.5%
8	NO	YES	YES	YES	190	34421.	1.3%
9	YES	NO	NO	NO	761	136167.	5.0%
10	YES	NO	NO	YES	151	29763.	1.1%
11	YES	NO	YES	NO	60	12053.	0.4%
12	YES	NO	YES	YES	161	32069.	1.2%
13	YES	YES	NO	NO	538	106356.	3.9%
14	YES	YES	NO	YES	228	44463.	1.6%
15	YES	YES	YES	NO	482	85892.	3.1%
16	YES	YES	YES	YES	2709	521260.	19.0%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				1774	301101.	(9.9% OF TOTAL SAMPLE)

ATTENDING	N	1032096.	857428.	751754.	784807.
	%	33.9%	28.2%	24.7%	25.8%
NOT ATTENDING	N	2011502.	2019187.	2124063.	2036122.
	%	66.1%	66.3%	69.8%	66.9%
STATUS UNKNOWN	N	0.	166983.	167782.	222669.
	%	0.0%	5.5%	5.5%	7.3%
TOTAL		3043598.	3043598.	3043598.	3043598.

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Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: MALES

STATUS EXAMINED: ATTENDANCE AT 2 OR 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	2960	525277.	39.0%
2	NO	NO	NO	YES	81	15370.	1.1%
3	NO	NO	YES	NO	64	11854.	0.9%
4	NO	NO	YES	YES	92	18752.	1.4%
5	NO	YES	NO	NO	131	23539.	1.7%
6	NO	YES	NO	YES	19	3193.	0.2%
7	NO	YES	YES	NO	75	12909.	1.0%
8	NO	YES	YES	YES	101	17847.	1.3%
9	YES	NO	NO	NO	547	97773.	7.3%
10	YES	NO	NO	YES	84	14308.	1.1%
11	YES	NO	YES	NO	67	13665.	1.0%
12	YES	NO	YES	YES	123	24119.	1.8%
13	YES	YES	NO	NO	490	94990.	7.1%
14	YES	YES	NO	YES	175	35315.	2.6%
15	YES	YES	YES	NO	470	89034.	6.6%
16	YES	YES	YES	YES	1769	348155.	25.9%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				1027	170070.	(11.2% OF TOTAL SAMPLE)

ATTENDING	N	780426.	643191.	549874.	485707.
	%	51.5%	42.4%	36.3%	32.0%
NOT ATTENDING	N	735744.	778841.	871558.	910534.
	%	48.5%	51.4%	57.5%	60.1%
STATUS UNKNOWN	N	0.	94137.	94738.	119929.
	%	0.0%	6.2%	6.2%	7.9%
TOTAL		1516170.	1516170.	1516170.	1516170.

PERSISTENCE STUDY

SAMPLE: FEMALES

STATUS EXAMINED: ATTENDANCE AT 2 OR 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	3516	619489.	44.4%
2	NO	NO	NO	YES	84	14191.	1.0%
3	NO	NO	YES	NO	49	8041.	0.6%
4	NO	NO	YES	YES	38	7775.	0.6%
5	NO	YES	NO	NO	103	18805.	1.3%
6	NO	YES	NO	YES	14	2427.	0.2%
7	NO	YES	YES	NO	59	10235.	0.7%
8	NO	YES	YES	YES	63	9120.	0.7%
9	YES	NO	NO	NO	645	115993.	8.3%
10	YES	NO	NO	YES	68	13016.	0.9%
11	YES	NO	YES	NO	60	9867.	0.7%
12	YES	NO	YES	YES	101	20821.	1.5%
13	YES	YES	NO	NO	470	92195.	6.6%
14	YES	YES	NO	YES	141	27383.	2.0%
15	YES	YES	YES	NO	504	96478.	6.9%
16	YES	YES	YES	YES	1745	330481.	23.7%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				735	128940.	(8.5% OF TOTAL SAMPLE)

ATTENDING	N	754264.	601592.	503273.	431583.
	%	49.5%	39.4%	33.0%	28.3%
NOT ATTENDING	N	770994.	852572.	950694.	992295.
	%	50.5%	55.9%	62.3%	65.1%
STATUS UNKNOWN	N	0.	71093.	71290.	101379.
	%	0.0%	4.7%	4.7%	6.6%
TOTAL		1525257.	1525257.	1525257.	1525257.

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: BLACKS

STATUS EXAMINED: ATTENDANCE AT 2 OR 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	836	100582.	45.9%
2	NO	NO	NO	YES	29	3891.	1.8%
3	NO	NO	YES	NO	24	2888.	1.3%
4	NO	NO	YES	YES	12	1379.	0.6%
5	NO	YES	NO	NO	33	3971.	1.8%
6	NO	YES	NO	YES	9	905.	0.4%
7	NO	YES	YES	NO	29	3737.	1.7%
8	NO	YES	YES	YES	40	4853.	2.2%
9	YES	NO	NO	NO	206	24627.	11.2%
10	YES	NO	NO	YES	24	3170.	1.4%
11	YES	NO	YES	NO	17	1924.	0.9%
12	YES	NO	YES	YES	22	2531.	1.2%
13	YES	YES	NO	NO	88	11115.	5.1%
14	YES	YES	NO	YES	41	5372.	2.5%
15	YES	YES	YES	NO	85	10544.	4.8%
16	YES	YES	YES	YES	298	37637.	17.2%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				290	32636.	(13.0% OF TOTAL SAMPLE)

ATTENDING	N	108133.	80843.	67519.	61057.
	%	43.0%	32.1%	26.8%	24.3%
NOT ATTENDING	N	143629.	154704.	167645.	166241.
	%	57.0%	61.4%	66.6%	66.0%
STATUS UNKNOWN	N	0.	16216.	16598.	24464.
	%	0.0%	6.4%	6.6%	9.7%
TOTAL		251762.	251762.	251762.	251762.

PERSISTENCE STUDY

SAMPLE: WHITES

STATUS EXAMINED: ATTENDANCE AT 2 OR 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	4840	918312.	40.5%
2	NO	NO	NO	YES	114	22182.	1.0%
3	NO	NO	YES	NO	74	14282.	0.6%
4	NO	NO	YES	YES	99	22029.	1.0%
5	NO	YES	NO	NO	169	33879.	1.5%
6	NO	YES	NO	YES	20	3902.	0.2%
7	NO	YES	YES	NO	84	16466.	0.7%
8	NO	YES	YES	YES	95	18435.	0.8%
9	YES	NO	NO	NO	852	169566.	7.5%
10	YES	NO	NO	YES	102	20646.	0.9%
11	YES	NO	YES	NO	95	19429.	0.9%
12	YES	NO	YES	YES	178	38543.	1.7%
13	YES	YES	NO	NO	791	164703.	7.3%
14	YES	YES	NO	YES	250	53200.	2.3%
15	YES	YES	YES	NO	787	159207.	7.0%
16	YES	YES	YES	YES	2904	592877.	26.1%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				1202	224535.	(9.0% OF TOTAL SAMPLE)
ATTENDING	N	1306436.	1068252.	900726.	785113.		
	%	52.4%	42.9%	36.1%	31.5%		
NOT ATTENDING	N	1185755.	1299669.	1466790.	1544376.		
	%	47.6%	52.1%	58.9%	62.0%		
STATUS UNKNOWN	N	0.	124271.	124675.	162702.		
	%	0.0%	5.0%	5.0%	6.5%		
TOTAL		2492192.	2492192.	2492192.	2492192.		

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: BLACK MALES

STATUS EXAMINED: ATTENDANCE AT 2 OR 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	343	41416.	46.8%
2	NO	NO	NO	YES	12	1517.	1.7%
3	NO	NO	YES	NO	5	372.	0.4%
4	NO	NO	YES	YES	7	891.	1.0%
5	NO	YES	NO	NO	13	1365.	1.5%
6	NO	YES	NO	YES	4	351.	0.4%
7	NO	YES	YES	NO	12	1257.	1.4%
8	NO	YES	YES	YES	18	2287.	2.6%
9	YES	NO	NO	NO	87	9454.	10.7%
10	YES	NO	NO	YES	8	907.	1.0%
11	YES	NO	YES	NO	5	491.	0.6%
12	YES	NO	YES	YES	9	1189.	1.3%
13	YES	YES	NO	NO	44	5567.	6.3%
14	YES	YES	NO	YES	20	3095.	3.5%
15	YES	YES	YES	NO	35	4802.	5.4%
16	YES	YES	YES	YES	107	13517.	15.3%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				178	19264.	(17.9% OF TOTAL SAMPLE)

ATTENDING	N	45469.	33764.	25817.	24361.
	%	42.2%	31.3%	24.0%	22.6%
NOT ATTENDING	N	62271.	64138.	72095.	69523.
	%	57.8%	59.5%	66.9%	64.5%
STATUS UNKNOWN	N	0.	9838.	9828.	13856.
	%	0.0%	9.1%	9.1%	12.9%
TOTAL		107740.	107740.	107740.	107740.

PERSISTENCE STUDY

SAMPLE: BLACK FEMALES

STATUS EXAMINED: ATTENDANCE AT 2 OR 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	FALL 73	FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	493	59166.	45.3%
2	NO	NO	NO	YES	17	2374.	1.8%
3	NO	NO	YES	NO	19	2516.	1.9%
4	NO	NO	YES	YES	5	487.	0.4%
5	NO	YES	NO	NO	20	2606.	2.0%
6	NO	YES	NO	YES	5	554.	0.4%
7	NO	YES	YES	NO	17	2479.	1.9%
8	NO	YES	YES	YES	22	2565.	2.0%
9	YES	NO	NO	NO	119	15173.	11.6%
10	YES	NO	NO	YES	16	2264.	1.7%
11	YES	NO	YES	NO	12	1434.	1.1%
12	YES	NO	YES	YES	13	1343.	1.0%
13	YES	YES	NO	NO	44	5548.	4.2%
14	YES	YES	NO	YES	21	2277.	1.7%
15	YES	YES	YES	NO	50	5743.	4.4%
16	YES	YES	YES	YES	190	24040.	18.4%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				110	13101.	(9.1% OF TOTAL SAMPLE)
ATTENDING	N	62522.	46398.	41622.	36616.		
	%	43.5%	32.7%	29.0%	25.5%		
NOT ATTENDING	N	81149.	90566.	95550.	96657.		
	%	56.5%	63.0%	66.5%	67.3%		
STATUS UNKNOWN	N	0.	6106.	6499.	10398.		
	%	0.0%	4.3%	4.5%	7.2%		
TOTAL		143671.	143671.	143671.	143671.		

Appendix E (cont.)

PERSISTENCE STUDY

SAMPLE: WHITE MALES

STATUS EXAMINED: ATTENDANCE AT 2 OR 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	2221	422505.	37.5%
2	NO	NO	NO	YES	62	12799.	1.1%
3	NO	NO	YES	NO	50	10362.	0.9%
4	NO	NO	YES	YES	75	16701.	1.5%
5	NO	YES	NO	NO	100	19795.	1.8%
6	NO	YES	NO	YES	13	2554.	0.2%
7	NO	YES	YES	NO	49	9722.	0.9%
8	NO	YES	YES	YES	68	13441.	1.2%
9	YES	NO	NO	NO	396	78709.	7.0%
10	YES	NO	NO	YES	60	11302.	1.0%
11	YES	NO	YES	NO	54	11703.	1.0%
12	YES	NO	YES	YES	101	20929.	1.9%
13	YES	YES	NO	NO	396	82328.	7.3%
14	YES	YES	NO	YES	138	29335.	2.6%
15	YES	YES	YES	NO	384	76593.	6.8%
16	YES	YES	YES	YES	1498	309024.	27.4%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				693	127427.	(10.2% OF TOTAL SAMPLE)

ATTENDING	N	669926.	557203.	479918.	423620.
	%	53.4%	44.4%	38.2%	33.7%
NOT ATTENDING	N	585304.	627872.	704442.	743264.
	%	46.6%	50.0%	56.1%	59.2%
STATUS UNKNOWN	N	0.	70155.	70870.	88347.
	%	0.0%	5.6%	5.6%	7.0%
TOTAL		1255230.	1255230.	1255230.	1255230.

Appendix E (cont.)

SAMPLE: WHITE FEMALES

STATUS EXAMINED: ATTENDANCE AT 2 OR 4 YEAR COLLEGE

HISTORY TYPE	1972 INTENTIONS	STATUS FALL 72	STATUS FALL 73	STATUS FALL 74	ACTUAL N	WEIGHTED N	% OF TOTAL WITH KNOWN STATUS
1	NO	NO	NO	NO	2619	495806.	43.5%
2	NO	NO	NO	YES	52	9384.	0.8%
3	NO	NO	YES	NO	24	3920.	0.3%
4	NO	NO	YES	YES	24	5328.	0.5%
5	NO	YES	NO	NO	69	14084.	1.2%
6	NO	YES	NO	YES	7	1347.	0.1%
7	NO	YES	YES	NO	35	6744.	0.6%
8	NO	YES	YES	YES	27	4994.	0.4%
9	YES	NO	NO	NO	456	90857.	8.0%
10	YES	NO	NO	YES	42	9344.	0.8%
11	YES	NO	YES	NO	41	7726.	0.7%
12	YES	NO	YES	YES	77	17613.	1.5%
13	YES	YES	NO	NO	395	82376.	7.2%
14	YES	YES	NO	YES	112	23865.	2.1%
15	YES	YES	YES	NO	403	82614.	7.2%
16	YES	YES	YES	YES	1406	283853.	24.9%
17	STATUS UNKNOWN IN ONE OR MORE YEARS				503	95975.	(7.8% OF TOTAL SAMPLE)
ATTENDING	N	635770.	511048.	420808.	360971.		
	%	51.4%	41.4%	34.1%	29.2%		
NOT ATTENDING	N	600059.	671459.	762010.	801058.		
	%	48.6%	54.3%	61.7%	64.8%		
STATUS UNKNOWN	N	0.	53321.	53010.	73800.		
	%	0.0%	4.3%	4.3%	6.0%		
TOTAL		1235829.	1235829.	1235829.	1235829.		